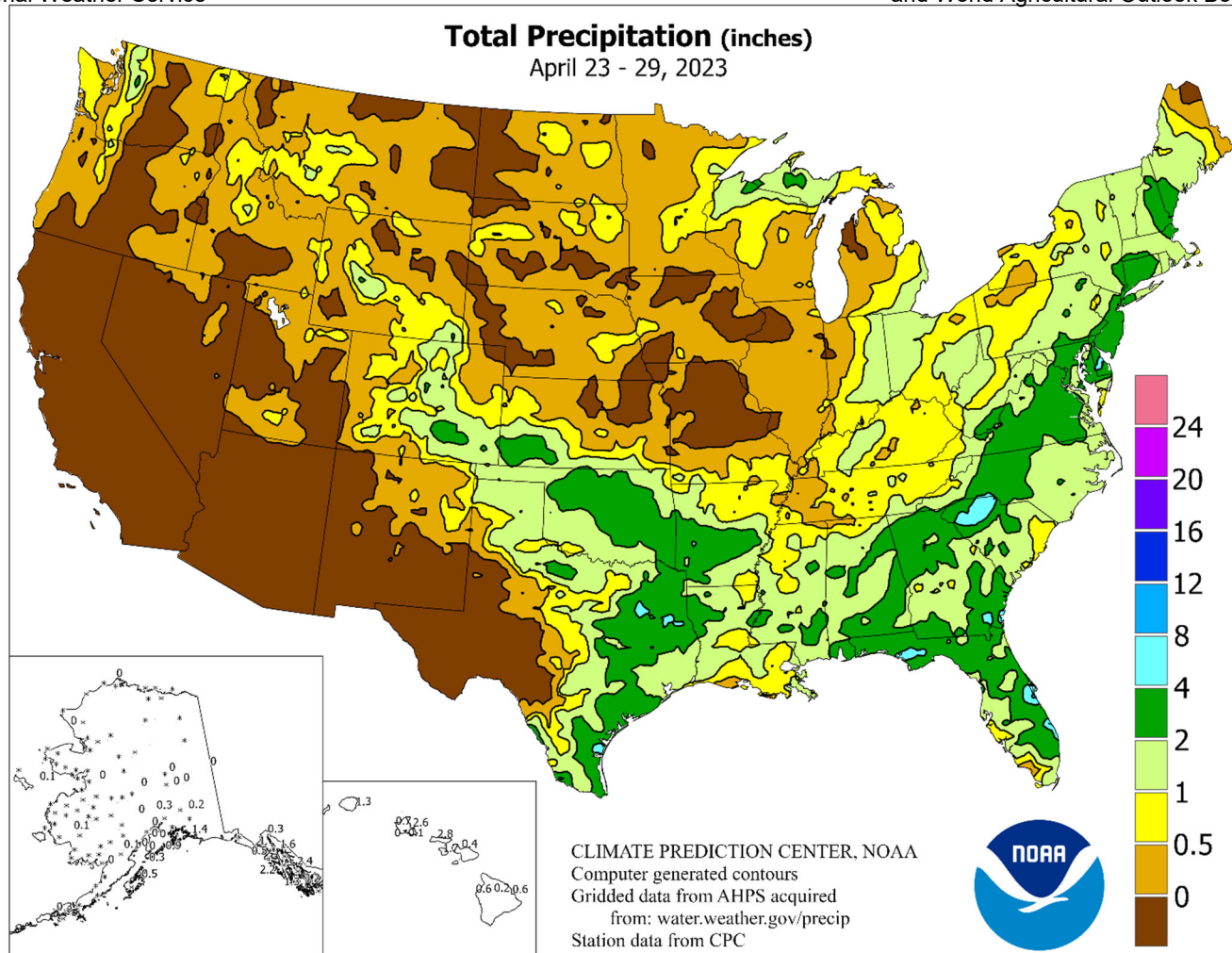# WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service
and World Agricultural Outlook Board

Total Precipitation (inches)
April 23 - 29, 2023

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Gridded data from AHPS acquired
from: water.weather.gov/precip
Station data from CPC

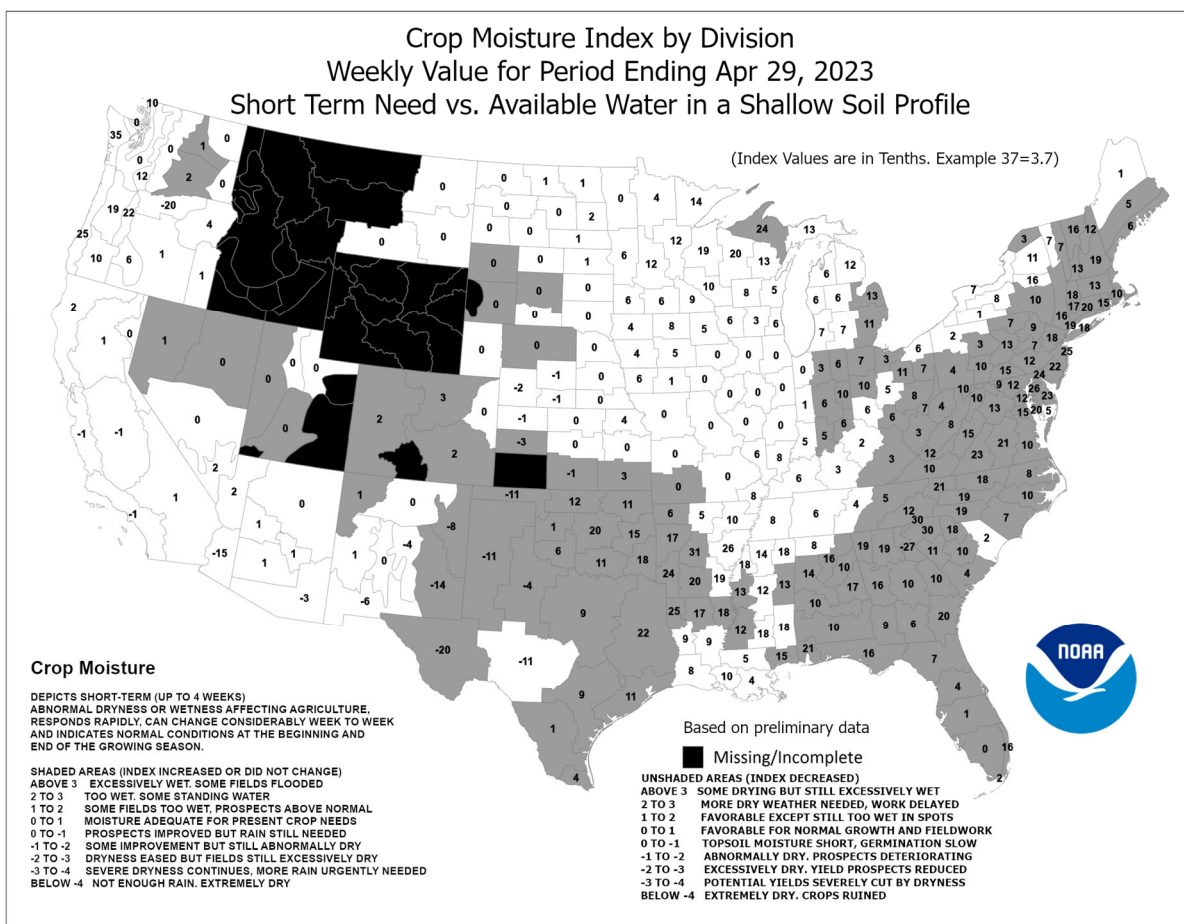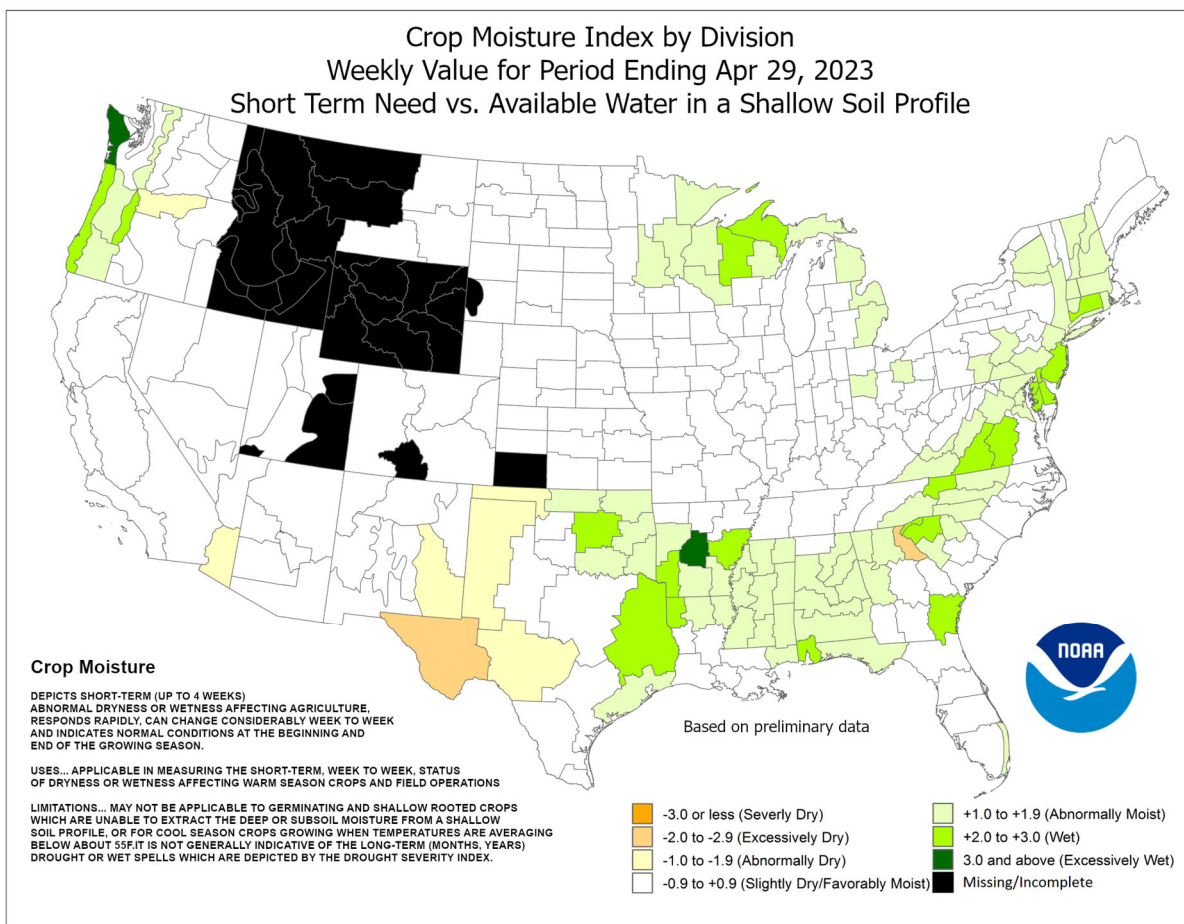## HIGHLIGHTS
April 23 – 29, 2023
Highlights provided by USDA/WAOB

Much-needed rain fell across portions of the **central and southern Plains**, providing limited and localized relief to drought-stressed rangeland, pastures, and winter grains. Some of the heaviest rain, generally 1 to 3 inches, fell in **southeastern Colorado**, **southwestern Kansas**, **northern and eastern Texas**, and much of **Oklahoma**. Significant rain extended eastward across the **South**, eventually reaching the **Atlantic Coast States**. The **Southern** and **Eastern** rain slowed fieldwork but benefited pastures and recently planted summer crops. Totals
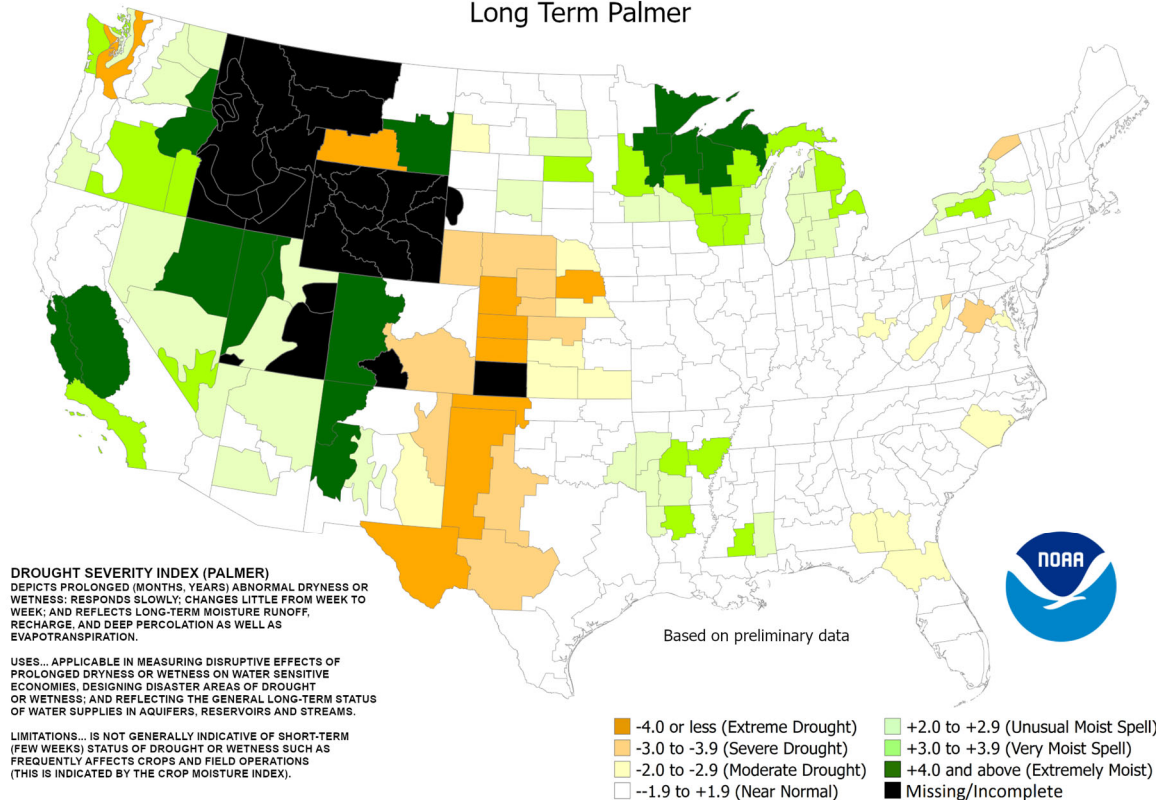
Contents

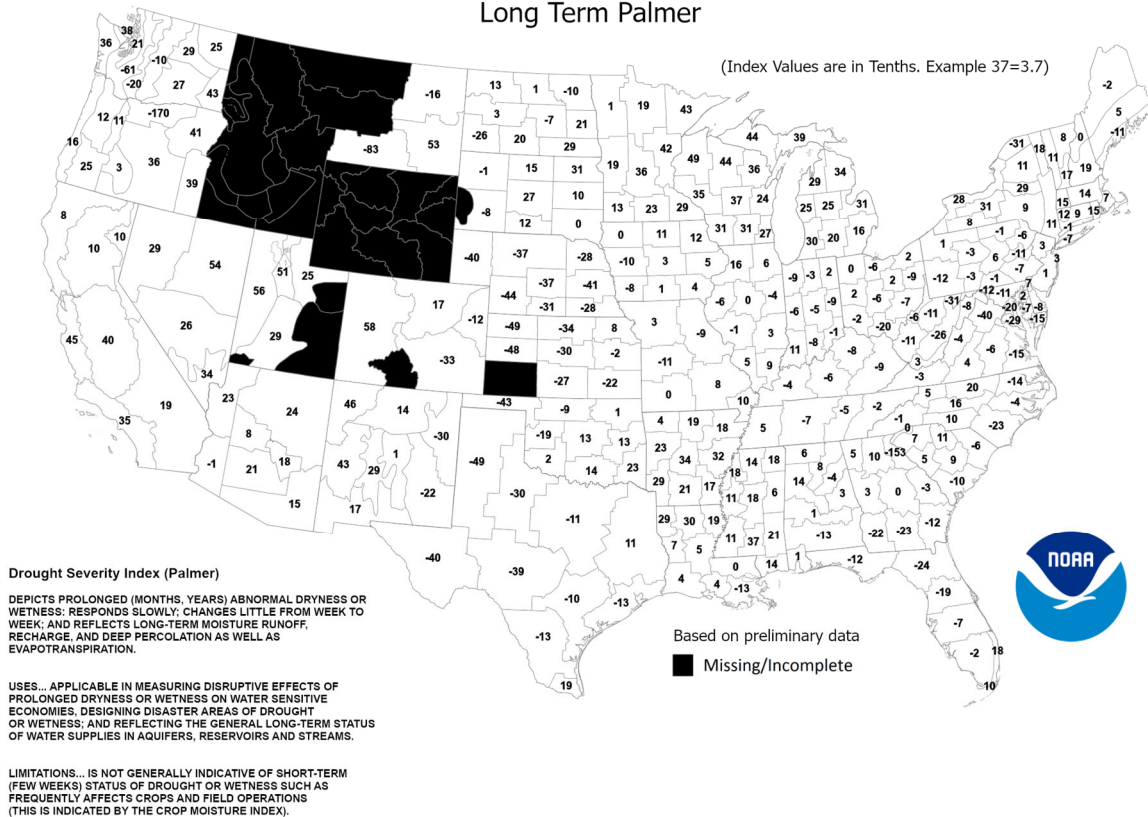## Crop Moisture Index by Division
Weekly Value for Period Ending Apr 29, 2023
Short Term Need vs. Available Water in a Shallow Soil Profile

Crop Moisture

DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.

USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

LIMITATIONS... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A SHALLOW SOIL PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F.IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.

Based on preliminary data

- -3.0 or less (Severly Dry)
- -2.0 to -2.9 (Excessively Dry)
- -1.0 to -1.9 (Abnormally Dry)
- -0.9 to +0.9 (Slightly Dry/Favorably Moist)
- +1.0 to +1.9 (Abnormally Moist)
- +2.0 to +3.0 (Wet)
- 3.0 and above (Excessively Wet)
- Missing/Incomplete

Crop Moisture Index by Division
Weekly Value for Period Ending Apr 29, 2023
Short Term Need vs. Available Water in a Shallow Soil Profile

(Index Values are in Tenths. Example 37=3.7)

Based on preliminary data

- Missing/Incomplete

Crop Moisture

DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.

SHADED AREAS (INDEX INCREASED OR DID NOT CHANGE)
ABOVE 3   EXCESSIVELY WET. SOME FIELDS FLOODED
2 TO 3   TOO WET. SOME STANDING WATER
1 TO 2   SOME FIELDS TOO WET, PROSPECTS ABOVE NORMAL
0 TO 1   MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
0 TO -1   PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2   SOME IMPROVEMENT BUT STILL ABNORMALLY DRY
-2 TO -3   DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY
-3 TO -4   SEVERE DRYNESS CONTINUES, MORE RAIN URGENTLY NEEDED
BELOW -4   NOT ENOUGH RAIN. EXTREMELY DRY

UNSHADED AREAS (INDEX DECREASED)
ABOVE 3   SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3   MORE DRY WEATHER NEEDED, WORK DELAYED
1 TO 2   FAVORABLE EXCEPT STILL TOO WET IN SPOTS
0 TO 1   FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1   TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1 TO -2   ABNORMALLY DRY. PROSPECTS DETERIORATING
-2 TO -3   EXCESSIVELY DRY. YIELD PROSPECTS REDUCED
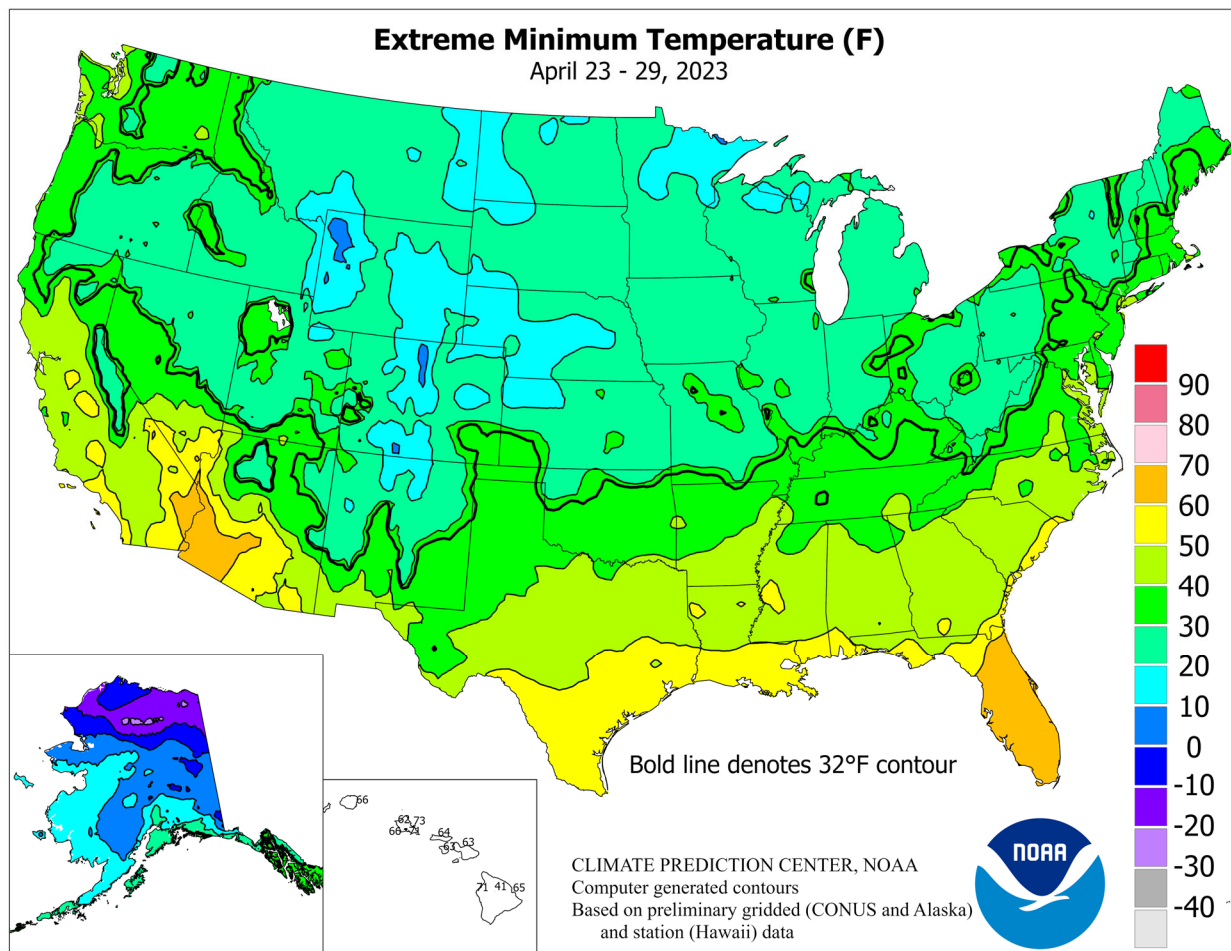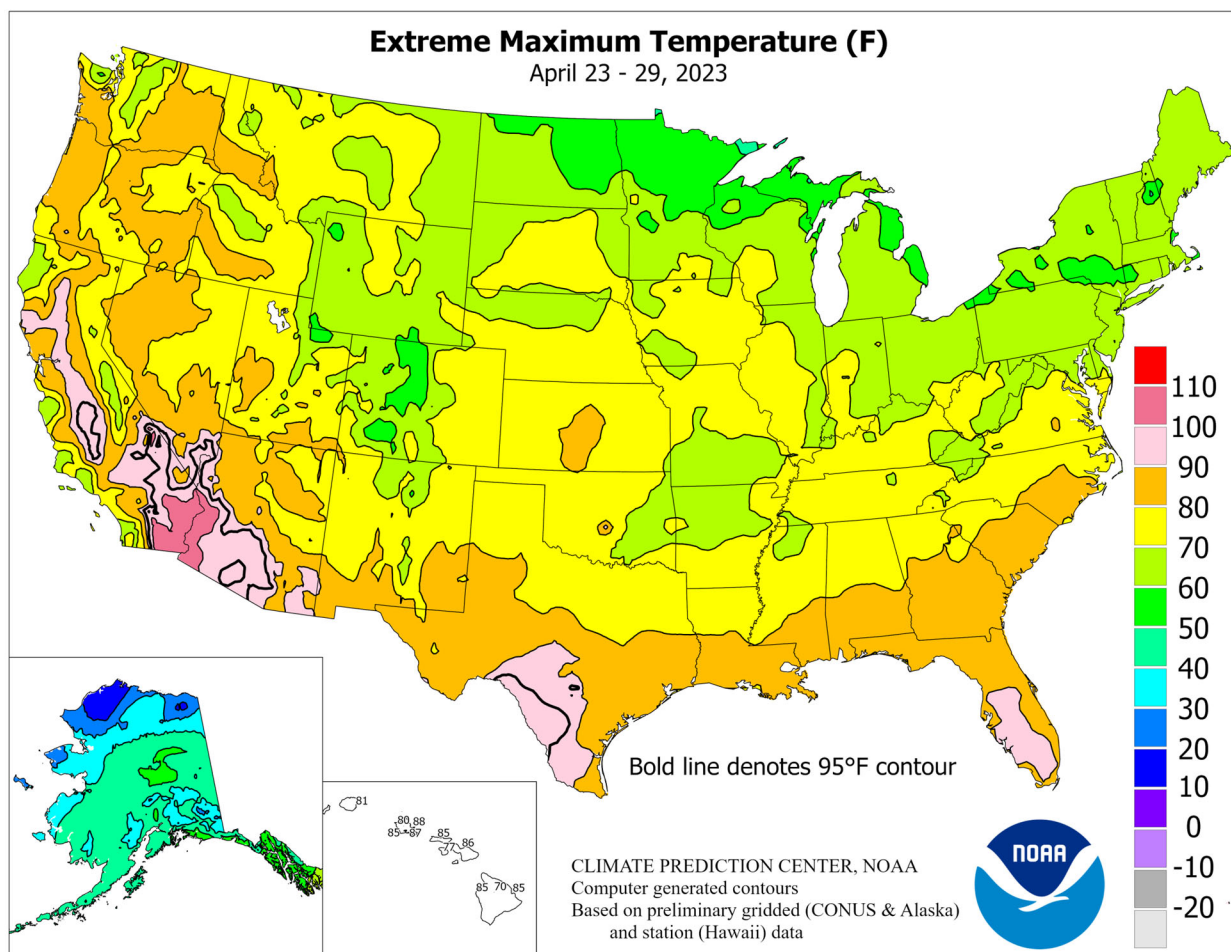-3 TO -4   POTENTIAL YIELDS SEVERELY CUT BY DRYNESS
BELOW -4   EXTREMELY DRY. CROPS RUINED

Drought Severity Index by Division
Weekly Value for Period Ending Apr 29, 2023
Long Term Palmer

DROUGHT SEVERITY INDEX (PALMER)
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR
WETNESS: RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO
WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF,
RECHARGE, AND DEEP PERCOLATION AS WELL AS
EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF
PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE
ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT
OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS
OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.

LIMITATIONS... IS NOT GENERALLY INDICATIVE OF SHORT-TERM
(FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS
FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS
(THIS IS INDICATED BY THE CROP MOISTURE INDEX).

Based on preliminary data

▨ -4.0 or less (Extreme Drought)	▨ +2.0 to +2.9 (Unusual Moist Spell)
▨ -3.0 to -3.9 (Severe Drought)	▨ +3.0 to +3.9 (Very Moist Spell)
▨ -2.0 to -2.9 (Moderate Drought)	▨ +4.0 and above (Extremely Moist)
▨ --1.9 to +1.9 (Near Normal)	▨ Missing/Incomplete

Drought Severity Index by Division
Weekly Value for Period Ending Apr 29, 2023
Long Term Palmer

(Index Values are in Tenths. Example 37=3.7)

Drought Severity Index (Palmer)

DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR
WETNESS: RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO
WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF,
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USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF
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LIMITATIONS... IS NOT GENERALLY INDICATIVE OF SHORT-TERM
(FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS
FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS
(THIS IS INDICATED BY THE CROP MOISTURE INDEX).

Based on preliminary data

■ Missing/Incomplete

Extreme Maximum Temperature (F)
April 23 - 29, 2023

Bold line denotes 95°F contour

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS & Alaska)
and station (Hawaii) data

110
100
90
80
70
60
50
40
30
20
10
0
-10
-20

Extreme Minimum Temperature (F)
April 23 - 29, 2023

Bold line denotes 32°F contour

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data

90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40

(Continued from front cover)

exceeding 4 inches were reported in a few spots, mainly across **northeastern Texas** and the **middle and southern Atlantic States**. Most other areas, including the **Northwest**, **Midwest**, and **northern half of the Plains**, received only spotty showers. Completely dry weather from **California into the Southwest** accompanied early-season heat. In fact, weekly temperatures averaged at least 10°F above normal in portions of **California**, with warmer-than-normal conditions extending eastward into the **Great Basin** and **Desert Southwest**, and northward into the **Pacific Northwest** and **northern Rockies**. In contrast, temperatures averaged as much as 10°F below normal in several areas, including the **southern Plains** and the **eastern Corn Belt**. During the early- to mid-week period, unusually cold weather gripped the **nation's mid-section**, resulting in widespread freezes as far south as the **central Plains** and **Ohio Valley**. In freeze-affected areas, producers monitored crops such as blooming fruits and heading winter wheat. However, only scattered emergence of summer crops was noted in areas where temperatures fell to 32°F or below.

Temperature Anomaly (F)
April 23 - 29, 2023

Bold line denotes zero contour

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data

On April 23 in **Nebraska**, daily-record low temperatures dipped to 15°F in **Broken Bow** and **Chadron**; 16°F in **North Platte** and **Sidney**; and 19°F in **Imperial**. In Kansas, daily-record lows plunged to 17°F in **Colby** and **Goodland**. On the same date, Midwestern records included 21°F in **Sioux City, IA**, and 23°F in **St. Joseph, MO**. **Indianapolis, IN**, collected a daily-record low (28°F) for April 24. By mid-week, another push of cold air led to record-setting lows for April 26 in locations such as **Mason City, IA** (22°F); **Fort Wayne, IN** (28°F); and **Moline, IL** (29°F). Temperatures remained below 60°F all week from parts of **North Dakota to Upper Michigan**. In **Jamestown, ND**, the highest reading reported during the entire month was 58°F (on the 26th), tying an April low-maximum temperature record originally set in 1975. In contrast, an early-season hot spell in the **Far West** boosted temperatures to 100°F or higher in parts of the **Desert Southwest** and to near the 95-degree mark in **California's San Joaquin Valley**. **Bakersfield, CA**, notched a daily-record high (97°F) on April 28. Elsewhere on the 28th, monthly record high temperatures were established in **Northwestern** locations such as **Roseburg, OR** (95°F), and **Hoquiam, WA** (86°F). **Palm Springs, CA**, posted a daily-record high (106°F) on April 29. Farther east, **Burlington, VT**, completed its warmest April on record, with a monthly average temperature of 50.6°F (5.0°F above normal). In contrast, April temperatures averaged 5 to 7°F below normal in **North Dakota** locations such as **Bismarck**, **Dickinson**, and **Minot**.
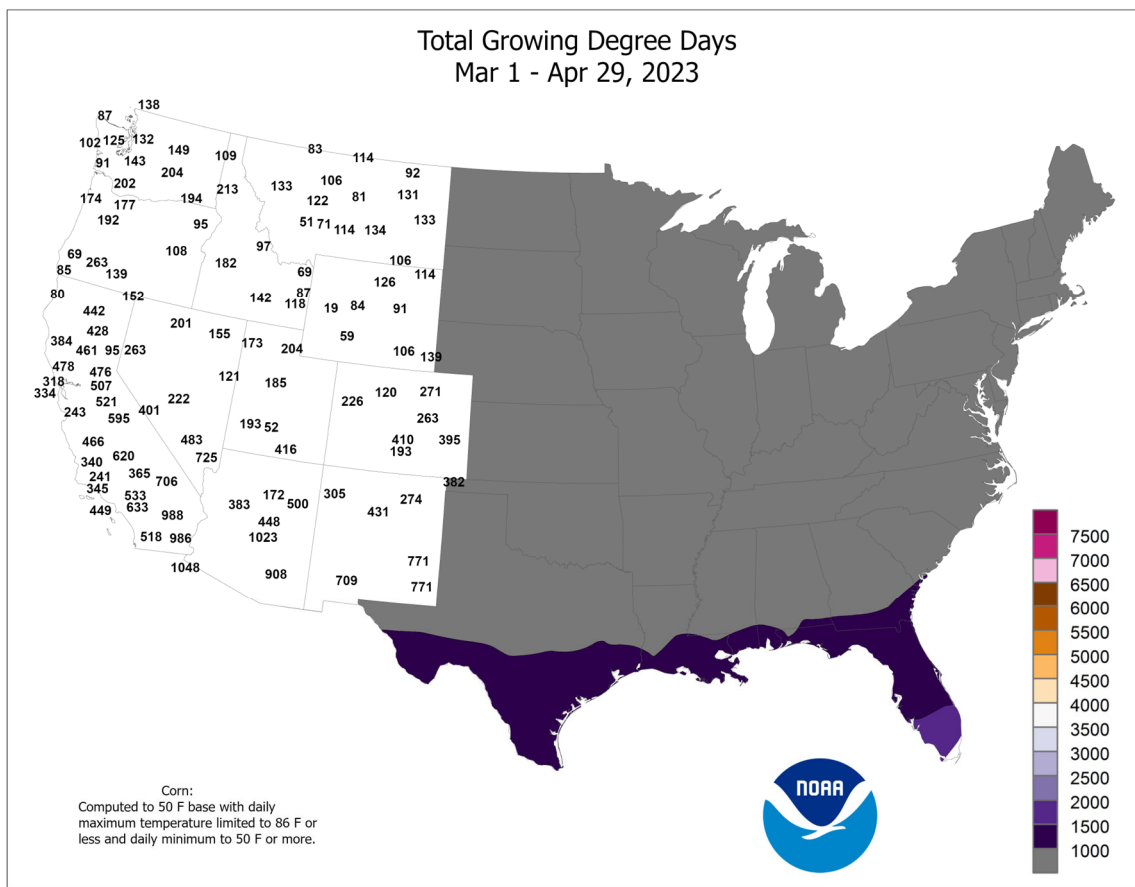
Early in the week, heavy rain drenched the **Northeast**. On April 23, daily-record totals topped 2 inches in **Hartford, CT** (3.13 inches); **Concord, NH** (2.46 inches); and **Worcester, MA** (2.02 inches). A separate area of rain in **Texas** resulted in record-setting totals for April 23 in **Laredo** (3.04 inches) and **Palacios** (2.12 inches). Later, a storm system arriving from the **West** delivered much-needed rain across the **central and southern Plains**. April 25-26 rainfall totaled 2.09 inches in **Pueblo, CO**, aided by a daily-record sum (1.40 inches) on the initial date. Similarly, April 25-26 rainfall reached 2.15 inches in **Garden City, KS**, and 1.12 inches in **Borger, TX**. Farther north, however, dry conditions prevailed. **North Platte, NE**, completed its driest April on record (0.04 inch, or 2 percent of normal), tying 1928.
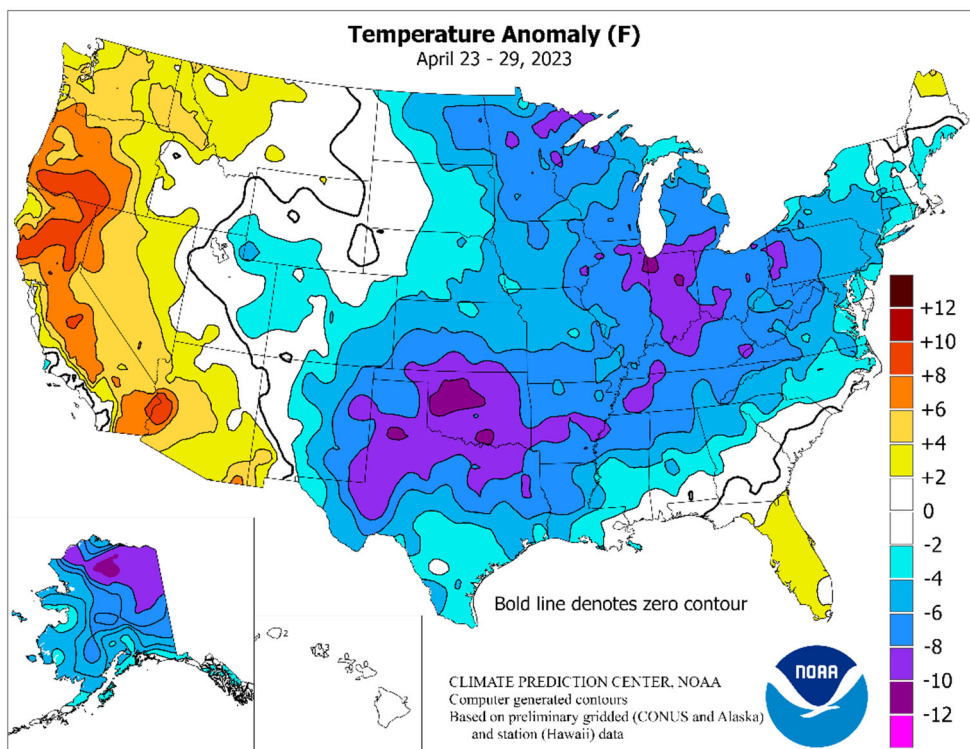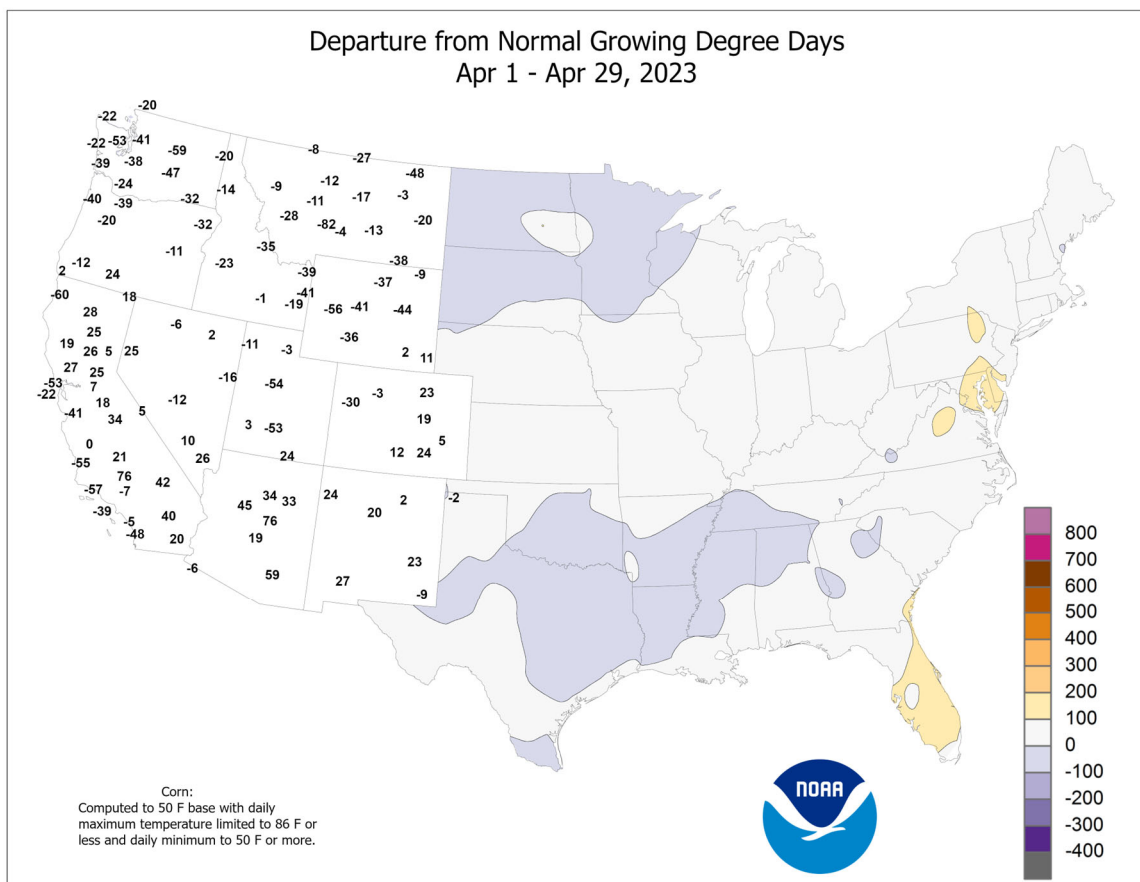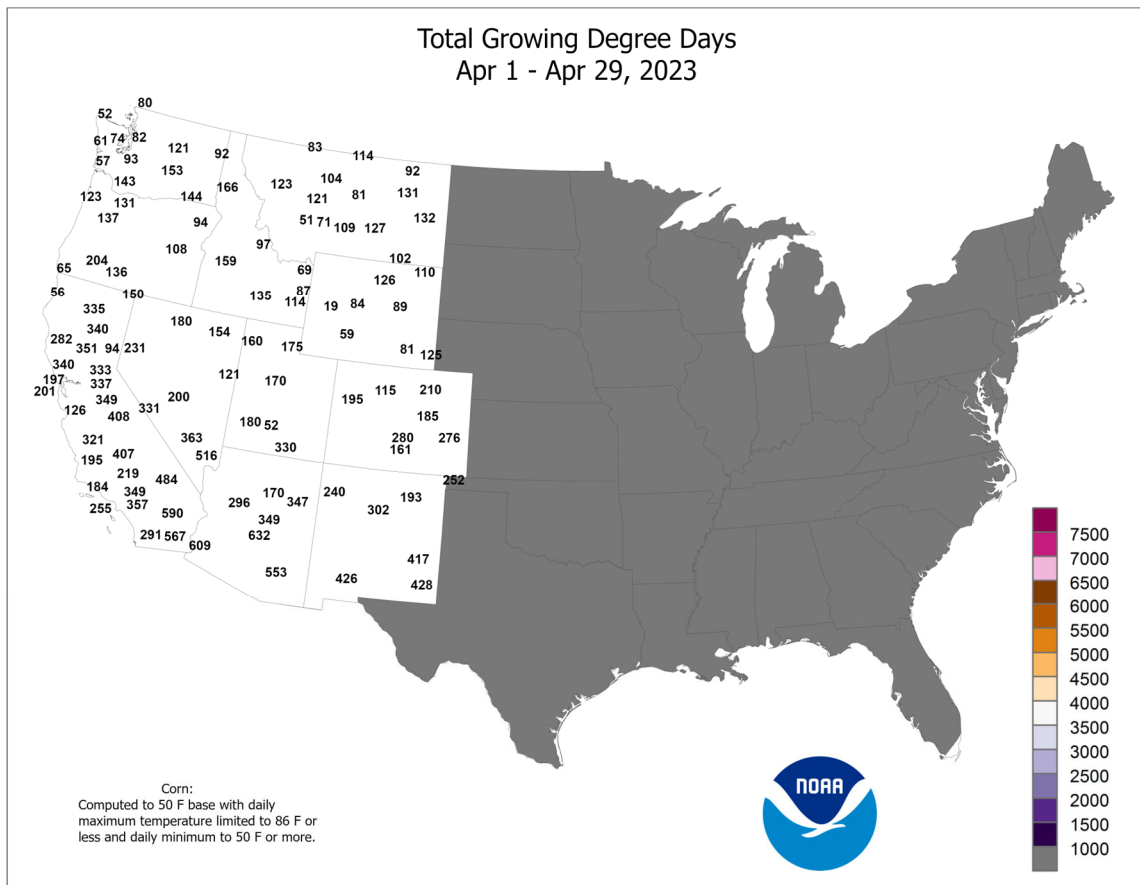
Since a major snowfall (13.9 inches) struck **North Platte** on January 18, precipitation has totaled 0.62 inch. During the second half of the week, two rounds of heavy rain affected portions of the **southern and eastern U.S.** As the first event unfolded on April 27, daily-record totals included 4.40 inches in **Greenville-Spartanburg, SC**, and 4.13 inches in **Pensacola, FL**. Daily-record amounts topped 2 inches on the 27th in **Florida** locations such as **Fort Pierce** (2.54 inches) and **Gainesville** (2.45 inches). By April 28, daily-record totals included 2.06 inches in **Lynchburg, VA**; 1.82 inches in **Baltimore, MD**; and 1.59 inches in **Zanesville, OH**. Rain was slow to exit the **Northeast**, where record-setting amounts for April 29 totaled 3.05 inches in **Newark, NJ**, and 2.46 inches at **New York's Central Park**. The last day of April featured lingering rain from the first round of storminess—**Augusta, ME**, received 3.00 inches—along with daily-record totals associated with the second round in locations such as **Scranton, PA** (3.06 inches), and **Georgetown, DE** (2.40 inches). Meanwhile, snow-melt flooding continued in the **upper Mississippi Basin**. Along the **Mississippi River**, it was a top-three flood crest in locations such as **La Crosse, WI** (3.89 feet above flood stage on April 26), and **Dubuque, IA** (7.03 feet above flood stage on April 29). In those locations, higher crests occurred only in April 1965 and 2001.

Alaska's spring chill persisted through another week, with temperatures averaging at least 10°F below normal at some northern locations. In fact, April temperatures averaged 13.4°F below normal in **Bettles**, along with 14.3°F in **Nome**, 13.3°F in **Kotzebue**, 12.9°F in **Delta Junction**, 12.2°F in **Fairbanks**, and 12.0°F in **Bethel**. Despite cold April weather, snow finally disappeared from **Anchorage**, with the depth dropping to a trace by the morning of the 30th—down from 30 inches on April 11. Snow cover in **Anchorage** had been continuous since October 25, 2022. Meanwhile, **Fairbanks** retained a 14-inch snow cover on April 30, down from 28 inches on the 13th. Farther south, April ended on a relatively dry note in **Hawaii**, although heavy rain earlier in the month bumped totals to above-normal values in many locations. **Lihue, Kauai**, netted an April sum of 4.79 inches (236 percent of normal), aided by a 2.20-inch total on the 18th. With drier weather in late in the month, **Hilo** (on the **Big Island**) posted a daily-record high of 87°F on April 24.

U.S. Drought Monitor

April 25, 2023
(Released Thursday, Apr. 27, 2023)
Valid 8 a.m. EDT

Author:
Richard Tinker
CPC/NOAA/NWS/NCEP

Drought Impact Types:
⌇ Delineates dominant impacts

S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:
☐ None
☐ D0 Abnormally Dry
☐ D1 Moderate Drought
☐ D2 Severe Drought
☐ D3 Extreme Drought
☐ D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

USDA   NDMC   NOAA

droughtmonitor.unl.edu

U.S. Monthly Drought Outlook
Drought Tendency During the Valid Period

Valid for May 2023
Released April 30, 2023

Author:
Adam Allgood
NOAA/NWS/NCEP/Climate Prediction Center

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

■ **Drought persists**
■ **Drought remains but improves**
■ **Drought removal likely**
■ **Drought development likely**

http://go.usa.gov/3eZGd

Total Growing Degree Days
Mar 1 - Apr 29, 2023

Corn:
Computed to 50 F base with daily
maximum temperature limited to 86 F or
less and daily minimum to 50 F or more.

Departure from Normal Growing Degree Days
Mar 1 - Apr 29, 2023

Corn:
Computed to 50 F base with daily
maximum temperature limited to 86 F or
less and daily minimum to 50 F or more.

Total Growing Degree Days
Apr 1 - Apr 29, 2023

Corn:
Computed to 50 F base with daily
maximum temperature limited to 86 F or
less and daily minimum to 50 F or more.

7500	
7000	
6500	
6000	
5500	
5000	
4500	
4000	
3500	
3000	
2500	
2000	
1500	
1000	

Departure from Normal Growing Degree Days
Apr 1 - Apr 29, 2023

Corn:
Computed to 50 F base with daily
maximum temperature limited to 86 F or
less and daily minimum to 50 F or more.

800	
700	
600	
500	
400	
300	
200	
100	
0	
-100	
-200	
-300	
-400	

National Weather Data for Selected Cities
Weather Data for the Week Ending April 29, 2023
Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																TEMP. °F		PRECIP	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR IN.	TOTAL IN. SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL IN. SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AK ANCHORAGE	44	30	47	23	37	-5	0.04	-0.06	0.04	1.69	152	3.91	143	80	49	0	5	1	0
BARROW	10	-1	14	-6	4	0	0.04	0.00	0.02	0.53	153	2.11	298	87	74	0	7	3	0
FAIRBANKS	40	20	54	9	30	-12	0.00	-0.09	0.00	0.80	110	2.46	133	66	37	0	7	0	0
JUNEAU	48	37	55	33	42	-1	1.58	0.72	0.57	7.17	102	18.43	106	96	67	0	0	7	2
KODIAK	44	32	49	30	38	-4	0.49	-0.93	0.14	3.52	32	14.30	56	84	54	0	4	4	0
NOME	30	20	35	14	25	-4	0.10	-0.07	0.06	3.10	213	5.38	159	81	62	0	7	2	0
AL BIRMINGHAM	71	52	77	46	62	-5	1.20	0.06	0.92	9.95	94	21.78	106	82	45	0	0	3	1
HUNTSVILLE	67	47	74	39	57	-9	0.84	-0.32	0.47	9.11	90	19.08	94	91	50	0	0	3	0
MOBILE	80	59	86	54	69	0	2.48	1.15	2.40	13.58	123	20.64	97	86	42	0	0	2	1
MONTGOMERY	77	55	83	47	66	-2	1.42	0.58	0.86	9.61	105	17.90	96	88	46	0	0	3	2
AR FORT SMITH	65	50	71	41	58	-7	2.08	0.80	0.85	9.67	112	15.54	109	90	49	0	0	5	2
LITTLE ROCK	65	51	70	41	58	-6	3.56	2.16	1.60	18.16	175	31.79	178	89	54	0	0	6	3
AZ FLAGSTAFF	68	31	77	27	49	4	0.01	-0.16	0.01	7.26	264	16.11	231	63	13	0	5	1	0
PHOENIX	95	67	99	63	81	5	0.00	-0.02	0.00	1.44	136	2.81	100	33	8	7	0	0	0
PRESCOTT	77	43	84	39	60	5	0.00	-0.09	0.00	2.06	144	5.47	140	47	12	0	0	0	0
TUCSON	92	59	98	55	75	5	0.00	-0.02	0.00	0.66	82	2.96	119	29	8	6	0	0	0
CA BAKERSFIELD	88	60	96	55	74	8	0.00	-0.09	0.00	2.30	132	6.68	162	65	24	3	0	0	0
EUREKA	55	45	59	40	50	-1	0.07	-0.55	0.07	9.78	105	19.64	90	95	87	0	0	1	0
FRESNO	89	61	96	54	75	10	0.00	-0.17	0.00	4.09	139	12.11	172	70	24	4	0	0	0
LOS ANGELES	65	55	68	54	60	-2	0.00	-0.09	0.00	7.44	320	18.78	229	95	69	0	0	0	0
REDDING	89	55	96	47	72	10	0.00	-0.42	0.00	12.22	175	25.31	136	71	16	4	0	0	0
SACRAMENTO	85	53	90	49	69	8	0.00	-0.19	0.00	5.25	133	13.04	117	81	25	1	0	0	0
SAN DIEGO	66	59	68	58	63	-1	0.00	-0.10	0.00	4.04	191	10.94	174	84	64	0	0	0	0
SAN FRANCISCO	69	50	79	48	60	1	0.00	-0.19	0.00	6.66	163	19.18	160	90	50	0	0	0	0
STOCKTON	86	52	91	49	69	6	0.00	-0.17	0.00	5.34	178	12.94	158	80	27	2	0	0	0
CO ALAMOSA	63	24	73	17	44	-2	0.11	-0.04	0.11	0.44	41	1.11	66	92	19	0	7	1	0
CO SPRINGS	59	33	72	27	46	-4	0.91	0.48	0.56	1.54	70	2.43	86	81	30	0	2	2	1
DENVER INTL	63	36	73	25	49	0	0.43	-0.06	0.20	1.23	50	2.70	83	84	25	0	1	3	0
GRAND JUNCTION	65	38	74	34	52	-3	0.12	-0.11	0.06	2.45	140	3.83	132	74	25	0	0	2	0
PUEBLO	64	35	77	30	50	-4	2.11	1.69	1.23	2.42	103	3.04	102	88	34	0	3	3	2
CT BRIDGEPORT	56	44	64	39	50	-4	3.22	2.26	2.03	7.18	88	13.39	92	91	61	0	0	4	2
HARTFORD	60	40	64	34	50	-4	3.68	2.74	3.06	8.54	113	16.08	115	94	47	0	0	3	1
DC WASHINGTON	65	49	72	44	57	-5	1.57	0.76	1.53	4.55	69	8.22	68	81	48	0	0	3	1
DE WILMINGTON	63	46	69	38	54	-3	1.92	1.09	1.50	5.92	78	9.96	73	83	50	0	0	4	1
FL DAYTONA BEACH	83	66	88	65	75	3	1.27	0.81	0.84	6.30	108	8.25	75	91	56	0	0	4	1
JACKSONVILLE	82	61	88	54	72	1	0.46	-0.13	0.39	5.06	82	8.37	68	96	51	0	0	2	0
KEY WEST	85	76	88	71	81	1	1.00	0.44	0.90	1.92	54	2.01	29	88	67	0	0	2	1
MIAMI	87	73	91	69	80	2	1.28	0.41	0.98	12.64	221	16.27	168	89	57	1	0	3	1
ORLANDO	87	67	91	65	77	3	2.21	1.61	1.84	3.26	59	4.80	47	94	50	1	0	3	1
PENSACOLA	79	63	84	55	71	0	3.36	2.15	3.24	9.36	88	15.72	77	82	54	0	0	2	1
TALLAHASSEE	82	60	88	47	71	1	1.16	0.43	0.65	6.43	74	16.99	97	90	48	0	0	4	1
TAMPA	86	69	89	68	78	2	0.49	-0.11	0.43	1.12	22	3.11	30	92	54	0	0	2	0
WEST PALM BEACH	87	70	89	67	78	2	2.50	1.65	1.51	10.22	148	11.54	88	94	58	0	0	4	2
GA ATHENS	70	50	80	43	60	-5	1.38	0.57	1.24	9.10	116	21.11	127	89	50	0	0	3	1
ATLANTA	70	54	79	47	62	-4	0.59	-0.29	0.39	8.54	101	18.02	102	81	47	0	0	2	0
AUGUSTA	76	53	81	41	65	-3	2.33	1.73	1.36	10.22	147	21.99	152	96	45	0	0	3	2
COLUMBUS	76	55	82	47	65	-3	0.30	-0.59	0.10	6.99	79	15.61	89	89	46	0	0	3	0
MACON	78	53	83	43	65	-2	0.60	-0.12	0.31	8.06	102	19.04	116	96	48	0	0	2	0
SAVANNAH	80	60	85	49	70	1	1.44	0.71	0.68	5.89	86	13.08	101	88	43	0	0	4	1
HI HILO	83	67	85	65	75	2	0.57	-1.36	0.55	16.36	74	54.91	137	92	56	0	0	2	1
HONOLULU	83	72	87	71	78	1	0.11	-0.02	0.06	4.87	157	8.41	122	90	62	0	0	4	0
KAHULUI	84	68	86	63	76	0	0.39	0.13	0.12	2.78	70	8.57	102	90	55	0	0	4	0
LIHUE	79	68	81	66	73	-2	1.31	0.91	0.69	10.85	143	24.43	174	96	69	0	0	4	1
IA BURLINGTON	61	37	72	28	49	-7	0.27	-0.81	0.18	4.04	65	8.02	85	83	35	0	2	3	0
CEDAR RAPIDS	60	33	72	26	47	-6	0.00	-0.94	0.00	1.84	34	4.93	65	84	32	0	3	0	0
DES MOINES	63	39	71	29	51	-4	0.07	-1.07	0.06	3.87	64	7.48	88	74	33	0	1	2	0
DUBUQUE	57	33	71	26	45	-6	0.09	-0.93	0.09	3.37	54	8.51	94	84	38	0	3	1	0
SIOUX CITY	63	33	71	21	48	-5	0.41	-0.39	0.39	2.37	49	5.10	80	82	35	0	2	2	0
WATERLOO	62	33	75	23	47	-6	0.03	-1.02	0.03	2.90	49	7.11	88	78	30	0	4	1	0
ID BOISE	71	43	86	37	57	3	0.06	-0.21	0.06	2.80	110	3.87	78	67	24	0	0	1	0
LEWISTON	73	46	89	39	59	5	0.07	-0.26	0.06	2.00	74	2.72	56	70	30	0	0	2	0
POCATELLO	67	32	80	25	49	1	0.00	-0.30	0.00	2.35	99	4.22	95	74	25	0	4	0	0
IL CHICAGO/O_HARE	55	37	67	31	46	-8	0.33	-0.66	0.16	5.59	92	11.88	118	80	39	0	1	3	0
MOLINE	63	34	74	27	49	-7	0.00	-1.03	0.00	3.67	58	9.30	95	80	30	0	3	0	0
PEORIA	62	37	73	30	49	-7	0.14	-0.90	0.08	6.25	95	11.10	104	81	31	0	2	2	0
ROCKFORD	56	32	68	25	44	-9	0.19	-0.74	0.12	5.79	96	11.43	123	86	37	0	3	3	0
SPRINGFIELD	64	38	74	30	51	-7	0.32	-0.75	0.32	5.48	83	9.05	85	82	40	0	2	1	0
IN EVANSVILLE	65	42	70	32	53	-8	0.28	-1.11	0.28	10.94	114	19.23	119	90	38	0	1	1	0
FORT WAYNE	56	36	70	28	46	-9	0.66	-0.20	0.53	5.89	91	12.68	115	91	45	0	2	2	1
INDIANAPOLIS	58	38	70	28	48	-10	0.51	-0.55	0.38	8.00	101	14.33	106	89	45	0	2	3	0
SOUTH BEND	55	33	67	27	44	-8	0.49	-0.41	0.18	7.73	135	14.12	132	89	46	0	4	4	0
KS CONCORDIA	66	39	79	31	53	-3	0.13	-0.58	0.13	1.58	39	3.31	60	82	35	0	1	1	0
DODGE CITY	60	40	79	30	50	-7	1.56	1.00	1.19	1.85	56	2.69	60	83	46	0	1	3	1
GOODLAND	62	33	76	17	47	-5	0.30	-0.16	0.18	1.30	51	1.88	56	89	36	0	3	3	0
TOPEKA	70	42	80	31	56	-3	0.03	-1.06	0.03	3.39	57	6.41	79	86	31	0	1	1	0

Based on 1991-2020 normals   *** Not Available

Weather Data for the Week Ending April 29, 2023

STATES AND STATIONS	TEMPERATURE °F Average Maximum	Average Minimum	Extreme High	Extreme Low	Average	Departure From Normal	PRECIPITATION Weekly Total, In.	Departure From Normal	Greatest In 24-Hour, In.	Total, In., Since Mar 1	Pct. Normal Since Mar 1	Total, In., Since Jan 1	Pct. Normal Since Jan 1	Relative Humidity Percent Average Maximum	Average Minimum	No. Days Temp 90 And Above	Temp 32 And Below	Precip .01 Inch Or More	Precip .50 Inch Or More
WICHITA	62	42	79	32	52	-7	0.41	-0.52	0.15	0.70	13	3.17	43	88	47	0	1	3	0
KY LEXINGTON	64	41	71	31	52	-7	0.48	-0.65	0.35	6.70	76	16.63	105	85	43	0	1	3	0
LOUISVILLE	64	44	71	36	54	-8	1.25	0.01	1.25	9.27	100	17.01	106	82	40	0	0	1	1
PADUCAH	66	45	73	35	55	-7	0.38	-0.96	0.29	12.56	130	23.52	135	92	38	0	0	2	0
LA BATON ROUGE	80	58	85	52	69	-1	0.57	-0.60	0.41	11.36	121	24.98	123	86	46	0	0	2	0
LAKE CHARLES	75	56	80	54	66	-5	0.90	-0.19	0.90	12.01	151	19.28	112	90	54	0	0	1	1
NEW ORLEANS	79	64	85	60	72	-1	0.61	-0.70	0.54	5.29	56	10.88	58	85	46	0	0	2	1
SHREVEPORT	70	54	79	52	62	-6	0.00	-1.16	0.00	0.00	0	0.00	0	84	50	0	0	0	0
MA BOSTON	55	46	57	44	50	-2	0.67	-0.11	0.36	5.44	70	11.93	83	91	68	0	0	3	0
WORCESTER	56	42	60	40	49	-2	2.28	1.36	1.83	7.56	92	15.33	102	92	51	0	0	2	1
MD BALTIMORE	64	46	69	37	55	-4	1.89	1.07	1.83	5.22	71	9.01	67	88	49	0	0	3	1
ME CARIBOU	60	36	67	31	48	4	0.00	-0.71	0.00	3.08	54	9.71	88	89	39	0	1	0	0
PORTLAND	50	38	61	33	44	-4	1.96	0.92	1.19	5.50	65	14.76	95	99	71	0	0	5	2
MI ALPENA	49	34	57	27	41	-4	0.77	0.08	0.51	6.69	144	11.05	138	96	59	0	2	3	1
GRAND RAPIDS	55	34	64	29	44	-7	0.26	-0.69	0.14	7.96	127	14.02	128	86	41	0	4	2	0
HOUGHTON LAKE	44	29	47	26	36	-10	0.00	-0.62	0.00	5.57	119	9.26	119	90	49	0	3	0	0
LANSING	54	34	66	30	44	-7	0.49	-0.30	0.21	8.29	157	13.29	146	87	42	0	4	3	0
MUSKEGON	55	36	65	28	45	-5	0.18	-0.65	0.14	6.51	113	12.29	119	81	41	0	2	2	0
TRAVERSE CITY	52	32	64	27	42	-5	0.14	-0.53	0.11	4.40	103	6.87	98	90	45	0	4	2	0
MN DULUTH	44	29	55	19	37	-8	0.45	-0.20	0.23	5.98	153	10.69	182	89	49	0	4	4	0
INT_L FALLS	47	26	55	11	37	-6	0.28	-0.15	0.19	5.65	218	6.42	157	91	41	0	4	3	0
MINNEAPOLIS	53	37	62	29	45	-7	0.25	-0.50	0.23	5.02	112	9.58	153	79	41	0	3	2	0
ROCHESTER	56	33	70	28	44	-5	0.23	-0.65	0.23	6.08	112	10.75	144	85	41	0	4	1	0
ST. CLOUD	53	33	60	26	43	-5	0.66	-0.05	0.48	6.63	162	9.99	181	91	41	0	4	3	0
MO COLUMBIA	67	42	71	33	54	-5	0.01	-1.33	0.01	3.20	41	7.25	60	78	32	0	0	1	0
KANSAS CITY	66	43	74	31	54	-3	0.03	-1.15	0.03	5.43	86	10.02	112	82	37	0	1	1	0
SAINT LOUIS	67	45	73	36	56	-5	0.06	-1.14	0.04	7.09	88	11.19	87	71	30	0	0	2	0
SPRINGFIELD	64	42	69	29	53	-7	0.36	-0.98	0.36	8.45	105	13.91	107	85	37	0	1	1	0
MS JACKSON	75	55	80	50	65	-2	0.97	-0.22	0.52	13.50	118	25.37	115	86	45	0	0	3	1
MERIDIAN	76	52	82	45	64	-3	1.54	0.28	0.80	11.20	101	27.31	124	94	46	0	0	3	2
TUPELO	68	50	75	41	59	-7	1.64	0.35	0.70	15.76	147	25.00	120	84	50	0	0	4	1
MT BILLINGS	65	36	69	29	50	2	0.07	-0.33	0.07	2.19	85	3.30	89	72	26	0	2	1	0
BUTTE	59	28	73	22	44	3	0.73	0.41	0.57	2.15	111	2.75	99	89	31	0	5	2	1
CUT BANK	62	32	70	26	47	4	0.14	-0.11	0.13	0.74	58	1.01	58	85	27	0	5	2	0
GLASGOW	63	36	72	25	50	1	0.04	-0.27	0.04	1.75	122	3.59	162	74	27	0	1	1	0
GREAT FALLS	62	34	71	27	48	3	0.12	-0.30	0.12	3.61	154	5.26	150	86	33	0	1	1	0
HAVRE	66	34	73	27	50	3	0.00	-0.28	0.00	0.91	61	1.75	76	83	26	0	2	0	0
MISSOULA	66	35	81	28	51	4	0.09	-0.21	0.09	1.21	53	2.68	65	81	28	0	3	1	0
NC ASHEVILLE	64	45	74	36	54	-6	1.67	0.65	1.35	7.38	94	15.06	97	86	53	0	0	4	1
CHARLOTTE	68	53	77	44	61	-3	2.91	2.00	1.94	8.20	106	16.87	118	87	52	0	0	4	2
GREENSBORO	66	47	72	42	57	-6	2.30	1.41	1.37	9.48	128	16.80	123	90	51	0	0	2	2
HATTERAS	70	59	74	52	64	0	0.52	-0.42	0.46	5.43	66	11.06	63	96	62	0	0	2	0
RALEIGH	72	51	79	43	61	-3	0.61	-0.20	0.33	10.21	135	15.78	115	91	51	0	0	3	0
WILMINGTON	77	58	86	51	67	1	1.95	1.20	1.50	8.46	122	13.88	97	89	46	0	0	4	1
ND BISMARCK	57	31	66	22	44	-3	0.15	-0.24	0.13	2.29	108	3.24	103	83	33	0	4	2	0
DICKINSON	58	29	65	18	44	-1	0.07	-0.31	0.07	0.26	13	0.36	14	86	28	0	3	1	0
FARGO	53	30	63	25	42	-6	0.04	-0.40	0.02	3.33	122	3.98	96	89	45	0	5	3	0
GRAND FORKS	50	29	56	24	40	-6	0.13	-0.24	0.07	2.57	124	3.01	98	89	49	0	5	3	0
JAMESTOWN	51	30	58	23	40	-6	0.19	-0.25	0.12	0.79	42	1.01	39	91	49	0	4	3	0
NE GRAND ISLAND	67	33	73	21	50	-4	0.12	-0.58	0.10	0.85	22	2.75	53	80	26	0	3	2	0
LINCOLN	67	33	74	21	50	-5	0.18	-0.65	0.18	1.20	29	3.41	59	80	34	0	2	1	0
NORFOLK	65	33	72	22	49	-3	0.09	-0.65	0.08	0.98	24	3.32	60	76	28	0	3	2	0
NORTH PLATTE	65	29	73	16	47	-4	0.01	-0.62	0.01	0.46	14	2.39	57	83	31	0	5	1	0
OMAHA	64	38	70	26	51	-5	0.03	-0.87	0.03	4.09	84	7.08	108	77	39	0	1	1	0
SCOTTSBLUFF	66	35	74	21	51	1	0.22	-0.29	0.22	0.96	33	2.76	72	79	47	0	2	1	0
VALENTINE	62	33	69	27	48	-3	0.26	-0.42	0.26	1.46	42	5.04	116	81	30	0	3	1	0
NH CONCORD	58	39	66	32	48	-1	0.34	-0.46	0.19	4.82	73	11.90	98	99	47	0	1	4	0
NJ ATLANTIC_CITY	63	44	71	33	53	-3	2.94	2.19	1.39	6.59	85	12.06	84	90	49	0	0	4	2
NEWARK	61	47	72	42	55	-3	4.32	3.38	2.88	9.04	114	14.65	102	81	46	0	0	3	3
NM ALBUQUERQUE	71	43	77	36	57	-2	0.00	-0.10	0.00	0.52	55	1.14	65	57	15	0	0	0	0
NV ELY	66	30	78	24	48	3	0.04	-0.20	0.04	2.27	112	5.13	142	75	18	0	5	1	0
LAS VEGAS	87	64	95	60	76	5	0.00	-0.04	0.00	0.50	81	1.45	73	24	8	3	0	0	0
RENO	77	46	85	41	62	8	0.00	-0.11	0.00	2.12	172	5.70	162	51	12	0	0	0	0
WINNEMUCCA	73	35	86	26	54	4	0.04	-0.20	0.04	2.48	135	3.50	123	72	16	0	3	1	0
NY ALBANY	59	38	66	30	49	-4	1.45	0.72	1.17	7.52	123	12.63	115	91	42	0	1	4	1
BINGHAMTON	53	36	58	33	44	-5	0.68	-0.18	0.24	4.73	72	9.91	85	92	50	0	0	4	0
BUFFALO	54	39	62	33	46	-5	0.75	-0.02	0.20	7.76	126	14.17	118	89	53	0	0	5	0
ROCHESTER	54	37	62	31	46	-6	0.52	-0.17	0.19	5.57	103	11.48	114	92	49	0	1	5	0
SYRACUSE	57	39	67	34	48	-3	0.63	-0.16	0.56	6.69	104	13.25	115	85	45	0	0	2	1
OH AKRON-CANTON	54	38	62	30	46	-9	0.79	-0.08	0.68	8.35	119	15.02	121	90	49	0	3	4	1
CINCINNATI	59	40	68	31	50	-9	0.78	-0.36	0.58	9.54	111	16.18	107	95	49	0	1	3	1
CLEVELAND	55	38	63	32	46	-8	0.13	-0.70	0.07	5.68	84	13.71	112	83	42	0	2	2	0
COLUMBUS	59	40	67	29	49	-8	0.46	-0.45	0.44	8.26	112	14.00	109	93	43	0	2	2	0
DAYTON	58	39	67	33	49	-9	1.05	-0.03	0.54	9.30	119	14.72	111	84	42	0	2	3	1
MANSFIELD	55	37	63	28	46	-8	0.80	-0.18	0.69	7.67	102	14.71	111	92	44	0	3	4	1

Based on 1991-2020 normals   *** Not Available

Weather Data for the Week Ending April 29, 2023

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	55	36	67	30	46	-10	1.19	0.37	0.66	4.78	80	12.16	114	92	47	0	4	4	1
	YOUNGSTOWN	54	36	63	28	45	-8	0.61	-0.24	0.53	7.10	103	13.95	112	91	48	0	4	4	1
OK	OKLAHOMA CITY	60	44	69	37	52	-10	2.45	1.36	1.41	5.98	99	8.35	95	93	59	0	0	4	2
	TULSA	63	46	71	35	55	-9	2.58	1.31	1.67	6.31	86	10.94	103	94	55	0	0	5	1
OR	ASTORIA	62	46	84	42	54	4	0.28	-0.85	0.25	16.08	118	27.33	87	95	59	0	0	2	0
	BURNS	69	36	84	30	53	6	0.05	-0.15	0.05	3.98	211	6.06	146	82	24	0	2	1	0
	EUGENE	72	46	87	38	59	7	0.08	-0.52	0.04	9.04	114	13.78	74	91	44	0	0	2	0
	MEDFORD	82	48	94	39	65	9	0.01	-0.29	0.01	2.70	82	4.23	53	78	20	1	0	1	0
	PENDLETON	72	45	83	37	58	6	0.27	0.00	0.27	2.53	101	3.85	73	77	34	0	0	1	0
	PORTLAND	73	50	87	43	62	7	0.35	-0.22	0.35	9.22	136	14.99	96	80	37	0	0	1	0
	SALEM	72	47	91	37	59	6	0.07	-0.51	0.04	10.21	138	16.36	90	87	40	1	0	2	0
PA	ALLENTOWN	59	39	64	34	49	-7	0.79	-0.08	0.46	6.37	88	11.41	86	89	48	0	0	4	0
	ERIE	51	38	59	31	44	-7	0.50	-0.28	0.17	7.44	115	16.13	130	91	60	0	2	4	0
	MIDDLETOWN	60	44	65	38	52	-5	1.20	0.34	1.05	5.88	82	9.34	73	85	50	0	0	3	1
	PHILADELPHIA	61	46	68	42	54	-5	2.15	1.34	1.61	5.61	76	10.25	77	88	50	0	0	4	1
	PITTSBURGH	55	37	65	29	46	-9	0.77	-0.01	0.76	4.51	71	9.48	79	86	44	0	2	2	1
	WILKES-BARRE	58	40	63	33	49	-6	0.38	-0.39	0.16	3.42	57	7.16	67	90	46	0	0	6	0
	WILLIAMSPORT	58	40	65	33	49	-6	0.92	0.06	0.44	3.50	52	6.87	57	91	50	0	0	3	0
RI	PROVIDENCE	57	42	61	40	50	-3	2.23	1.31	1.33	7.91	87	16.06	97	99	56	0	0	3	2
SC	CHARLESTON	80	60	86	52	70	1	0.43	-0.31	0.24	3.52	53	10.97	84	87	40	0	0	3	0
	COLUMBIA	76	55	83	43	66	-1	1.65	0.99	0.78	9.27	146	18.50	140	93	42	0	0	4	2
	FLORENCE	76	55	84	45	65	-2	0.63	-0.07	0.45	7.91	129	15.96	131	94	41	0	0	4	0
	GREENVILLE	67	48	77	39	58	-6	5.23	4.25	4.60	13.85	164	24.44	149	88	51	0	0	5	1
SD	ABERDEEN	59	31	72	22	45	-4	0.17	-0.45	0.08	2.79	102	3.89	100	92	37	0	3	4	0
	HURON	62	33	73	22	47	-3	0.05	-0.65	0.05	1.36	38	2.26	46	90	29	0	3	1	0
	RAPID CITY	62	31	69	21	46	0	0.00	-0.58	0.00	3.65	125	4.89	131	81	33	0	4	0	0
	SIOUX FALLS	61	34	70	24	48	-4	0.04	-0.72	0.02	2.01	44	5.34	90	77	31	0	3	2	0
TN	BRISTOL	66	42	74	33	54	-6	0.78	-0.09	0.55	6.15	80	15.22	100	91	40	0	0	3	1
	CHATTANOOGA	67	50	78	44	58	-6	1.76	0.59	0.91	9.77	97	19.41	96	83	46	0	0	3	2
	KNOXVILLE	65	46	74	37	55	-8	0.75	-0.35	0.35	8.68	91	18.41	96	88	49	0	0	3	0
	MEMPHIS	66	50	72	40	58	-8	0.38	-1.07	0.26	14.63	128	27.08	134	93	52	0	0	4	0
	NASHVILLE	68	46	73	36	57	-7	0.26	-0.97	0.20	6.39	70	12.97	73	84	42	0	0	2	0
TX	ABILENE	71	50	81	42	60	-8	1.02	0.48	1.02	2.39	69	4.41	75	86	45	0	0	1	1
	AMARILLO	63	40	76	33	51	-8	0.53	0.13	0.31	1.26	47	1.76	45	89	43	0	0	4	0
	AUSTIN	78	58	86	52	68	-4	1.40	0.75	0.82	4.80	92	7.78	80	95	50	0	0	4	2
	BEAUMONT	76	59	82	54	67	-4	1.02	0.09	1.01	7.79	105	14.19	89	89	55	0	0	2	1
	BROWNSVILLE	84	65	89	60	75	-4	3.66	3.35	1.77	6.21	216	6.76	135	97	63	0	0	4	3
	CORPUS CHRISTI	80	65	86	59	73	-2	4.73	4.22	3.34	8.16	192	9.04	130	97	66	0	0	4	2
	DEL RIO	84	61	98	54	72	-3	1.12	0.72	1.12	3.02	115	3.24	83	78	33	1	0	1	1
	EL PASO	82	52	86	46	67	-2	0.00	-0.05	0.00	0.06	13	0.64	52	44	9	0	0	0	0
	FORT WORTH	69	52	73	45	60	-8	1.58	0.72	1.41	5.53	86	10.35	88	88	53	0	0	4	1
	GALVESTON	76	64	82	57	70	-3	1.17	0.71	0.46	4.57	91	8.34	72	88	66	0	0	4	0
	HOUSTON	75	58	82	54	66	-6	0.76	-0.19	0.34	6.98	95	14.98	107	92	58	0	0	4	0
	LUBBOCK	69	42	82	37	56	-8	0.03	-0.35	0.03	0.11	4	0.85	23	85	32	0	0	1	0
	MIDLAND	73	45	85	39	59	-10	0.00	-0.16	0.00	0.00	0	0.40	15	83	27	0	0	0	0
	SAN ANGELO	78	51	90	44	65	-5	0.00	-0.40	0.00	0.78	26	2.20	43	82	29	1	0	0	0
	SAN ANTONIO	82	58	111	52	70	-1	1.30	0.67	0.74	5.97	129	7.85	94	89	45	0	0	4	1
	VICTORIA	78	62	84	56	70	-3	2.76	2.03	1.68	5.93	100	13.19	125	97	66	0	0	4	2
	WACO	70	51	77	43	60	-8	2.40	1.54	1.56	5.25	81	9.94	84	98	64	0	0	3	2
	WICHITA FALLS	67	47	74	41	57	-8	1.71	1.00	1.63	4.99	113	7.95	113	93	51	0	0	4	1
UT	SALT LAKE CITY	67	42	81	38	55	0	0.17	-0.32	0.08	5.48	142	9.03	137	72	28	0	0	2	0
VA	LYNCHBURG	68	44	76	38	56	-3	2.54	1.70	1.93	6.09	85	12.15	90	87	42	0	0	2	2
	NORFOLK	67	53	71	45	60	-3	0.76	-0.07	0.75	4.23	60	9.45	71	91	51	0	0	2	1
	RICHMOND	70	47	75	40	58	-3	1.74	0.94	1.70	4.49	63	9.47	73	89	44	0	0	2	1
	ROANOKE	67	43	75	35	55	-6	2.46	1.60	1.75	5.38	78	11.03	85	87	41	0	0	2	2
	WASH/DULLES	64	44	72	38	54	-4	1.44	0.55	1.40	3.80	55	7.42	59	88	46	0	0	3	1
VT	BURLINGTON	59	40	67	34	49	-1	1.07	0.31	0.69	5.25	100	10.09	110	91	44	0	0	5	1
WA	OLYMPIA	68	41	83	34	55	4	0.32	-0.38	0.24	9.49	102	16.37	73	98	41	0	0	2	0
	QUILLAYUTE	62	43	83	39	52	4	0.95	-0.57	0.80	20.30	103	37.02	82	96	57	0	0	2	1
	SEATTLE-TACOMA	66	47	80	44	57	3	0.51	-0.11	0.26	6.31	86	11.66	69	85	41	0	0	2	0
	SPOKANE	67	43	82	39	55	6	0.23	-0.02	0.23	2.10	68	4.16	64	74	31	0	0	1	0
	YAKIMA	74	42	86	32	58	5	0.04	-0.08	0.04	2.09	177	3.40	106	77	24	0	1	1	0
WI	EAU CLAIRE	55	33	69	22	44	-6	0.25	-0.51	0.19	5.25	106	8.36	118	84	39	0	4	2	0
	GREEN BAY	52	33	65	26	42	-6	0.45	-0.30	0.32	5.71	117	8.69	116	87	49	0	4	2	0
	LA CROSSE	57	37	73	29	47	-6	0.19	-0.73	0.16	4.27	75	8.35	103	80	36	0	2	2	0
	MADISON	55	32	68	26	43	-7	0.35	-0.57	0.27	5.71	96	10.46	117	82	39	0	4	2	0
	MILWAUKEE	52	36	62	34	44	-6	0.32	-0.58	0.17	6.00	101	12.29	130	83	43	0	0	3	0
WV	BECKLEY	61	40	68	29	50	-7	1.33	0.45	0.89	5.02	67	12.13	88	84	40	0	1	3	1
	CHARLESTON	65	41	74	30	53	-7	0.43	-0.50	0.27	4.70	62	12.73	89	94	35	0	1	2	0
	ELKINS	61	34	72	24	48	-7	0.47	-0.56	0.44	5.42	68	11.70	80	90	36	0	5	2	0
	HUNTINGTON	65	41	72	29	53	-8	0.64	-0.39	0.34	6.26	78	13.98	97	89	37	0	1	2	0
WY	CASPER	60	28	70	15	44	0	0.06	-0.33	0.06	2.09	95	4.77	146	87	30	0	5	1	0
	CHEYENNE	56	33	65	22	45	0	0.52	0.01	0.40	1.59	59	3.11	87	85	35	0	3	3	0
	LANDER	60	30	71	24	45	-1	1.16	0.61	0.70	3.41	104	7.30	162	81	30	0	5	2	1
	SHERIDAN	64	32	72	26	48	3	0.26	-0.27	0.26	2.85	101	5.25	128	74	25	0	4	1	0

Based on 1991-2020 normals *** Not Available

National Agricultural Summary

April 24 – 30, 2023
Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Most of the Pacific Northwest and Southwest remained dry in late April, while large parts of the mid Atlantic, southern Plains, and Southeast, as well as parts of the Great Lakes, lower Mississippi Valley, Northeast, and Rockies recorded at least twice the normal amount of weekly precipitation. Meanwhile, much of the nation was cooler than normal for the week. Parts of the Ohio Valley, Midwest, Mississippi Valley, and southern Plains recorded temperatures 9°F or more below normal. In contrast, most of Florida and the West were warmer than normal. Portions of California and southern Oregon recorded weekly temperatures 9°F or more above normal.

Corn: By April 30, producers had planted 26 percent of the nation's corn crop, 13 percentage points ahead of last year but equal to the 5-year average. Progress was furthest advanced in Missouri and Texas, with 80 and 74 percent planted, respectively. Six percent of the nation's corn acreage had emerged by April 30, three percentage points ahead of the previous year and 1 point ahead of the 5-year average.

Soybean: Nineteen percent of the nation's soybean acreage was planted by April 30, twelve percentage points ahead of last year and 8 points ahead of the 5-year average. Planting progress was furthest advanced in Louisiana at 59 percent, 3 percentage points ahead of last year and 20 points ahead of the 5-year average.

Winter Wheat: By April 30, twenty-five percent of the nation's winter wheat crop was headed, 4 percentage points ahead of last year and 2 points ahead of the 5-year average. On April 30, twenty-eight percent of the 2023 winter wheat crop was reported in good to excellent condition, 2 percentage points above the previous week and 1 point above the previous year. In Kansas, the largest winter wheat-producing state, 64 percent of the winter wheat crop was rated in poor to very poor condition.

Cotton: Nationwide, 15 percent of the cotton crop was planted by April 30, equal to the previous year but 1 percentage point ahead of the 5-year average. Planting progress was furthest advanced in California at 85 percent, 9 percentage points behind last year but 20 points ahead of the 5-year average.

Sorghum: Twenty-one percent of the nation's sorghum acreage was planted by April 30, one percentage point ahead of the previous year but 1 percentage point behind the 5-year average. Texas had planted 69 percent of its sorghum acreage by April 30, three percentage points ahead of the previous year but equal to the 5-year average.

Rice: By April 30, producers had seeded 63 percent of the 2023 rice acreage, 21 percentage points ahead of the previous year and 14 points ahead of the 5-year average. Progress was furthest advanced in Louisiana and Texas, with 89 and 83 percent planted, respectively. By April 30, thirty-nine percent of the nation's rice acreage had emerged, 16 percentage points ahead of last year and 10 points ahead of the 5-year average.

Small Grains: Nationally, oat producers had seeded 49 percent of this year's acreage by April 30, five percentage points ahead of the previous year but 3 points behind the 5-year average. Thirty-three percent of the nation's oat acreage had emerged by April 30, three percentage points ahead of the previous year but 2 points behind the 5-year average.

Nineteen percent of the nation's barley crop was planted by April 30, fifteen percentage points behind last year and 16 points behind the 5-year average. Progress was furthest advanced in Washington and Idaho, with 55 and 47 percent planted, respectively. Three percent of the nation's barley had emerged by April 30, six percentage points behind the previous year and 7 points behind the 5-year average.

By April 30, twelve percent of the spring wheat crop was seeded, 6 percentage points behind last year and 10 points behind the 5-year average. Progress was furthest advanced in Washington, at 74 percent planted, 1 percentage point behind last year and 3 points behind the 5-year average. By April 30, two percent of the nation's spring wheat crop had emerged, 3 percentage points behind the previous year and 4 points behind the 5-year average.

Other Crops: Nationally, peanut producers had planted 8 percent of the 2023 peanut acreage by April 30, one percentage point behind the previous year and 2 points behind the 5-year average. Producers in Florida had planted 24 percent of the 2023 intended acreage by week's end, 1 percentage point behind last year but equal to the 5-year average.

By April 30, twenty-four percent of the sugarbeet crop was planted, 7 percentage points ahead of last year but 14 percentage points behind the 5-year average. Progress was furthest advanced in Michigan and Idaho, with 76 and 71 percent planted, respectively.

Crop Progress and Condition
Week Ending April 30, 2023
Weekly U.S. Progress and Condition Data provided by USDA/NASS

Corn Percent Planted

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
CO	12	2	6	16
IL	6	18	40	29
IN	5	9	20	15
IA	8	10	29	34
KS	33	24	34	32
KY	24	36	52	36
MI	1	1	2	7
MN	0	1	5	23
MO	25	58	80	41
NE	25	10	30	29
NC	77	52	70	69
ND	0	0	0	3
OH	3	6	10	7
PA	5	9	14	6
SD	3	0	1	10
TN	38	49	60	46
TX	73	72	74	69
WI	1	1	2	11
18 Sts	13	14	26	26

These 18 States planted 92% of last year's corn acreage.

Corn Percent Emerged

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
CO	0	0	0	0
IL	0	0	4	4
IN	0	0	1	2
IA	0	0	1	1
KS	7	3	10	8
KY	3	12	24	14
MI	0	0	0	0
MN	0	0	0	0
MO	3	11	31	9
NE	1	0	1	2
NC	53	25	48	45
ND	0	0	0	0
OH	0	0	0	1
PA	0	0	1	0
SD	0	0	0	0
TN	9	11	23	19
TX	62	60	65	56
WI	0	0	0	0
18 Sts	3	3	6	5

These 18 States planted 92% of last year's corn acreage.

Soybeans Percent Planted

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
AR	21	34	43	23
IL	4	15	39	15
IN	3	8	18	9
IA	4	5	16	15
KS	10	4	14	6
KY	11	19	27	12
LA	56	41	59	39
MI	3	2	6	7
MN	0	0	1	8
MS	45	34	43	38
MO	4	16	34	5
NE	17	4	16	13
NC	15	4	9	11
ND	0	0	0	0
OH	2	6	14	5
SD	1	0	0	3
TN	8	16	23	8
WI	3	0	3	5
18 Sts	7	9	19	11

These 18 States planted 95% of last year's soybean acreage.

Cotton Percent Planted

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
AL	10	6	16	13
AZ	68	33	47	60
AR	11	5	9	7
CA	94	20	85	65
GA	10	4	8	12
KS	3	0	1	1
LA	32	5	17	18
MS	9	1	4	8
MO	7	1	5	5
NC	10	1	6	6
OK	0	0	0	3
SC	5	1	3	8
TN	3	3	5	3
TX	20	18	20	17
VA	16	20	31	10
15 Sts	15	12	15	14

These 15 States planted 99% of last year's cotton acreage.

Rice Percent Planted

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
AR	36	51	68	47
CA	17	0	5	14
LA	86	86	89	86
MS	47	39	53	43
MO	4	63	73	37
TX	81	74	83	83
6 Sts	42	51	63	49

These 6 States planted 100% of last year's rice acreage.

Rice Percent Emerged

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
AR	12	21	34	22
CA	0	0	0	1
LA	77	81	83	78
MS	20	11	32	21
MO	1	12	31	15
TX	67	58	69	70
6 Sts	23	30	39	29

These 6 States planted 100% of last year's rice acreage.

Sorghum Percent Planted

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
CO	0	0	3	0
KS	1	0	2	1
NE	0	0	1	2
OK	3	15	16	6
SD	2	0	0	1
TX	66	63	69	69
6 Sts	20	18	21	22

These 6 States planted 100% of last year's sorghum acreage.

Crop Progress and Condition
Week Ending April 30, 2023
Weekly U.S. Progress and Condition Data provided by USDA/NASS

Winter Wheat Percent Headed

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
AR	47	46	71	63
CA	80	74	83	64
CO	0	0	0	0
ID	0	0	0	1
IL	11	7	15	11
IN	1	0	5	2
KS	9	3	11	8
MI	0	0	0	0
MO	9	12	25	18
MT	0	0	0	0
NE	0	0	0	0
NC	71	57	77	57
OH	0	0	0	1
OK	37	33	43	48
OR	0	0	0	3
SD	0	0	0	0
TX	63	53	69	68
WA	0	0	0	1
18 Sts	21	18	25	23

These 18 States planted 88% of last year's winter wheat acreage.

Winter Wheat Condition by Percent

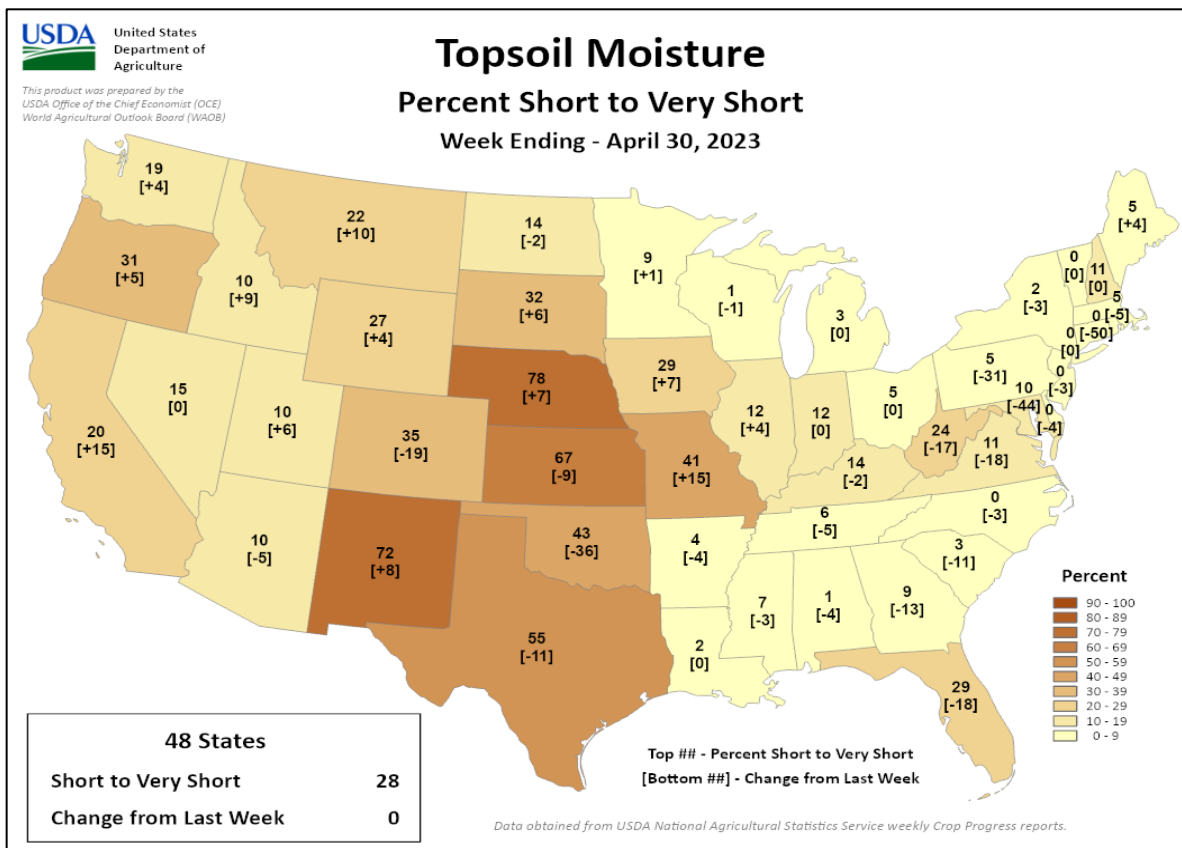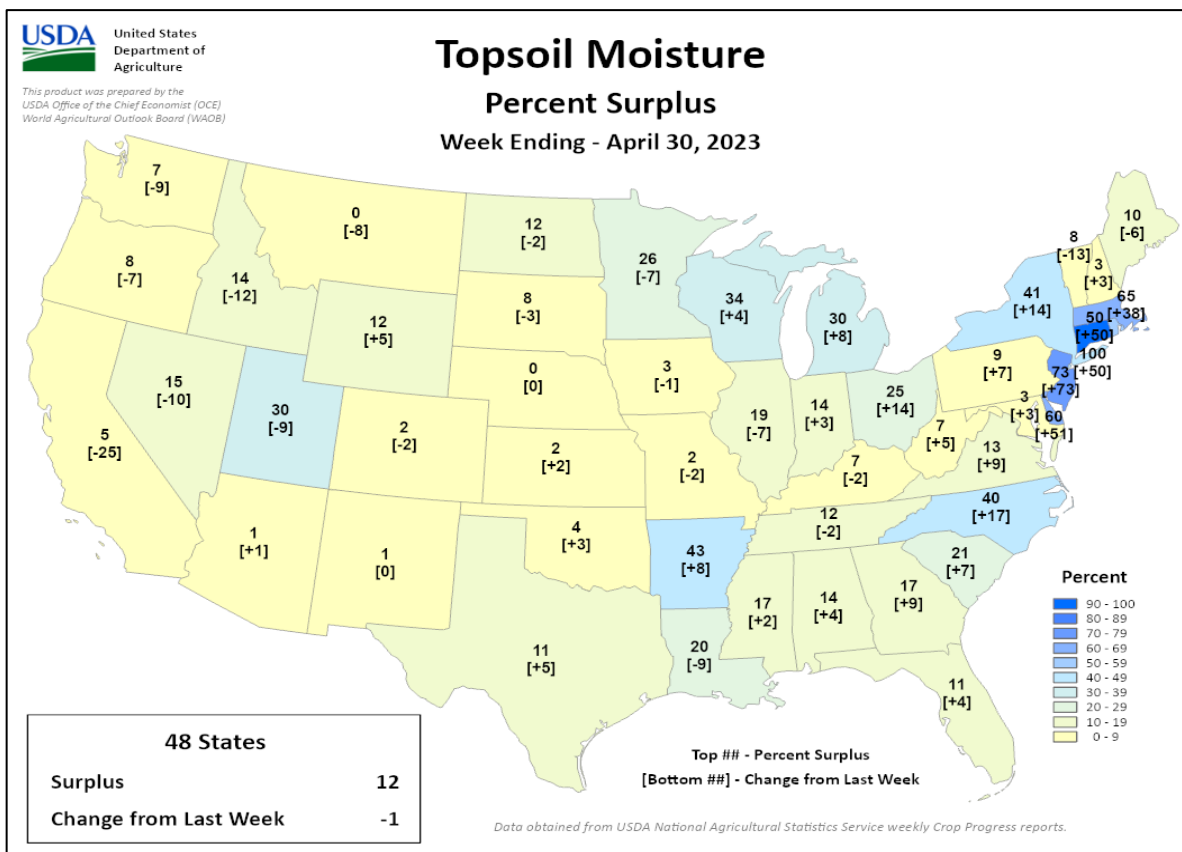|	VP	P	F	G	EX
AR	0	7	33	49	11
CA	0	0	5	65	30
CO	10	27	35	24	4
ID	1	5	59	34	1
IL	1	2	31	55	11
IN	2	5	18	55	20
KS	34	30	23	12	1
MI	2	4	30	52	12
MO	0	6	27	63	4
MT	1	3	50	46	0
NE	18	33	35	12	2
NC	0	1	13	74	12
OH	2	4	28	53	13
OK	28	33	30	8	1
OR	8	20	38	30	4
SD	5	9	64	21	1
TX	26	31	26	15	2
WA	1	8	33	54	4
18 Sts	19	23	30	25	3
Prev Wk	18	23	33	23	3
Prev Yr	22	21	30	24	3

Oats Percent Planted

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
IA	61	67	85	77
MN	6	5	10	28
NE	87	68	84	77
ND	1	0	1	6
OH	44	61	71	53
PA	30	52	68	48
SD	46	13	28	39
TX	100	100	100	100
WI	14	15	23	33
9 Sts	44	42	49	52

These 9 States planted 69% of last year's oat acreage.

Spring Wheat Percent Planted

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
ID	54	26	45	66
MN	1	0	0	16
MT	29	5	12	23
ND	5	1	6	13
SD	46	4	17	40
WA	75	48	74	77
6 Sts	18	5	12	22

These 6 States planted 100% of last year's spring wheat acreage.

Barley Percent Planted

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
ID	55	29	47	68
MN	1	0	1	14
MT	41	6	14	30
ND	1	0	1	9
WA	64	27	55	66
5 Sts	34	10	19	35

These 5 States planted 84% of last year's barley acreage.

Oats Percent Emerged

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
IA	17	10	29	27
MN	0	1	3	9
NE	46	23	43	43
ND	0	0	0	0
OH	15	19	30	26
PA	4	17	37	29
SD	19	0	2	14
TX	100	100	100	100
WI	2	0	5	11
9 Sts	30	28	33	35

These 9 States planted 69% of last year's oat acreage.

Spring Wheat Percent Emerged

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
ID	25	1	12	23
MN	0	0	0	3
MT	6	0	0	3
ND	0	0	0	1
SD	11	0	0	13
WA	38	10	38	43
6 Sts	5	1	2	6

These 6 States planted 100% of last year's spring wheat acreage.

Barley Percent Emerged

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
ID	26	2	13	29
MN	0	0	0	2
MT	4	0	0	2
ND	0	0	0	1
WA	16	4	12	31
5 Sts	9	1	3	10

These 5 States planted 84% of last year's barley acreage.

Crop Progress and Condition
Week Ending April 30, 2023
Weekly U.S. Progress and Condition Data provided by USDA/NASS

Peanuts Percent Planted

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
AL	6	4	12	11
FL	25	19	24	24
GA	10	2	6	10
NC	3	2	7	4
OK	0	0	0	2
SC	4	2	7	11
TX	1	0	0	3
VA	8	0	15	7
8 Sts	9	4	8	10

These 8 States planted 96% of last year's peanut acreage.

Sugarbeets Percent Planted

	Prev Year	Prev Week	Apr 30 2023	5-Yr Avg
ID	84	53	71	88
MI	14	49	76	45
MN	1	0	0	25
ND	0	0	0	19
4 Sts	17	17	24	38

These 4 States planted 86% of last year's sugarbeet acreage.

VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

NA - Not Available
* Revised

Days Suitable for Fieldwork — Week Ending April 30, 2023

Crop Progress and Condition
Week Ending April 30, 2023
Weekly U.S. Progress and Condition Data provided by USDA/NASS

USDA United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)

Topsoil Moisture
Percent Surplus
Week Ending - April 30, 2023

48 States	
Surplus	12
Change from Last Week	-1

Top ## - Percent Surplus
[Bottom ##] - Change from Last Week

Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

USDA United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)

Topsoil Moisture
Percent Short to Very Short
Week Ending - April 30, 2023

48 States	
Short to Very Short	28
Change from Last Week	0

Top ## - Percent Short to Very Short
[Bottom ##] - Change from Last Week

Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

Crop Progress and Condition
Week Ending April 30, 2023
Weekly U.S. Progress and Condition Data provided by USDA/NASS

USDA United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)

Subsoil Moisture
Percent Surplus
Week Ending - April 30, 2023

48 States

Surplus	10
Change from Last Week	0

Top ## - Percent Surplus
[Bottom ##] - Change from Last Week

Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

USDA United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)

Subsoil Moisture
Percent Short to Very Short
Week Ending - April 30, 2023

48 States

Short to Very Short	33
Change from Last Week	-1

Top ## - Percent Short to Very Short
[Bottom ##] - Change from Last Week

Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports.

International Weather and Crop Summary

April 23-29, 2023
International Weather and Crop Highlights and Summaries provided by USDA/WAOB

EUROPE: Additional showers maintained good to excellent prospects for winter grains and oilseeds over much of Europe, though extreme drought and heat prevailed in southwestern growing areas.

WESTERN FSU: Widespread showers further boosted moisture supplies for vegetative winter grains and oilseeds.

MIDDLE EAST: Continued cool and wet weather in Turkey maintained favorable prospects for winter wheat and barley, while another round of showers benefited winter grains in Iraq and western Iran.

NORTHWESTERN AFRICA: Scorching heat and exceptional drought further lowered yield prospects for filling to maturing winter grains over much of the region.

EAST ASIA: Showery weather lingered into eastern and southern China before drier, warmer weather overspread winter crop areas by the end of the period.

SOUTHEAST ASIA: Pre-monsoon rainfall in Thailand provided beneficial early-season moisture as growers prepare for the start of the rainy season.

AUSTRALIA: Scattered showers dotted the wheat belt, maintaining overall favorable conditions for winter crop planting, germination, and emergence.

ARGENTINA: Fieldwork advanced, with rain providing a timely boost in moisture for winter grain germination in the northwest.

BRAZIL: Scattered showers benefited immature corn in western and southern farming areas, while seasonal dryness dominated northeastern cotton areas.

MEXICO: Rain benefited immature sorghum in the northeast.

April 2023

| COUNTRY	CITY	AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	TOT	DEP NRM
ALGERI	ALGER	24	9	35	4	16	0.9	1	-57
	BATNA	24	6	35	-3	15	1.5	3	-34
ARGENT	IGUAZU	26	16	32	10	22	-0.4	153	-3
	FORMOSA	28	17	36	11	23	-0.4	80	-80
	CERES	26	15	32	9	20	0.7	101	-13
	CORDOBA	25	12	31	6	19	1.1	20	-60
	RIO CUARTO	24	12	30	4	18	0.8	301	237
	ROSARIO	24	12	31	5	18	0.2	23	-97
	BUENOS AIRES	24	12	31	4	18	0.7	41	-59
	SANTA ROSA	24	11	31	4	17	1.1	64	-6
	TRES ARROYOS	21	10	29	0	15	0.5	65	-15
AUSTRA	DARWIN	32	25	34	19	28	0.4	36	******
	BRISBANE	26	16	30	12	21	0.1	42	-29
	PERTH	23	12	31	6	18	-2.1	33	1
	CEDUNA	24	12	33	7	18	0.2	29	11
	ADELAIDE	21	13	29	9	17	-0.5	31	0
	MELBOURNE	20	11	26	3	16	0.3	52	13
	WAGGA	20	10	26	4	15	-1.1	48	19
	CANBERRA	19	6	24	1	13	-1	97	68
AUSTRI	VIENNA	13	5	22	-4	9	-2.1	111	64
	INNSBRUCK	14	4	24	-3	9	-1.4	93	34
BAHAMA	NASSAU	29	23	33	21	26	1.3	234	178
BARBAD	BRIDGETOWN	30	24	30	22	27	-0.1	36	-16
BELARU	MINSK	13	3	20	-3	8	0.8	38	-5
BERMUD	ST GEORGES	22	18	25	13	20	1.2	90	8
BOLIVI	LA PAZ	16	1	19	-5	9	0.5	8	-26
BRAZIL	FORTALEZA	30	25	32	23	27	0.1	170	-111
	RECIFE	30	25	31	23	27	-0.7	165	-1
	CAMPO GRANDE	28	20	32	14	24	-1.5	133	45
	FRANCA	26	17	30	12	22	-0.7	165	83
	RIO DE JANEI	28	21	33	18	25	-0.7	83	4
	LONDRINA	***	***	35	11	***	*****	108	11
	SANTA MARIA	26	15	34	6	20	-0.2	82	-57
BULGAR	SOFIA	14	4	21	-2	9	-1.8	57	5
BURKIN	OUAGADOUGOU	40	22	42	0	31	-2.6	16	******
CANADA	LETHBRIDGE	12	-2	26	-10	5	*****	8	******
	REGINA	6	-5	19	-26	0	-3.6	21	-5
	WINNIPEG	6	-2	15	-12	2	-2.7	22	-6
	TORONTO	14	4	29	-5	9	2.1	102	21
	MONTREAL	13	3	28	-7	8	1.5	101	9
	PRINCE ALBER	6	-7	18	-23	0	-2.1	10	-19
	CALGARY	11	-2	24	-9	5	0.3	6	-23
	VANCOUVER	12	5	23	-1	8	-1.1	99	15
CANARY	LAS PALMAS	25	18	30	15	21	1.9	2	******
CHILE	SANTIAGO	25	9	33	4	17	1.7	3	******
CHINA	HARBIN	14	2	23	-5	8	0.6	25	4
	HAMI	20	6	28	-4	13	-2.3	1	-4
	BEIJING	21	9	28	3	15	-0.2	22	-1
	TIENTSIN	21	10	28	3	15	0	46	25
	LHASA	16	4	20	0	10	0.4	24	15
	KUNMING	26	14	29	10	20	2.4	3	-23
	CHENGCHOW	22	12	29	5	17	-0.1	96	59
	YEHCHANG	23	14	33	6	18	1.1	91	-6
	HANKOW	24	14	34	7	19	1.2	262	125
	CHUNGKING	26	18	36	12	22	1.9	101	-2
	CHIHKIANG	24	14	34	8	19	1.1	168	40
	WU HU	23	13	36	7	18	0.8	52	-57
	SHANGHAI	22	13	32	5	18	1.9	38	-38
	NANCHANG	24	16	34	10	20	0.9	388	175
	TAIPEI	26	20	33	17	23	0.3	83	-69
	CANTON	26	20	33	14	23	0.7	91	-103
	NANNING	26	20	32	15	23	0.1	117	42
COLOMB	BOGOTA	20	10	24	5	15	0.4	59	-49
COTE D	ABIDJAN	32	25	33	0	28	-0.1	263	97
CUBA	CAMAGUEY	32	21	34	18	27	1	196	******
CYPRUS	LARNACA	23	12	30	7	18	0.2	16	******
CZECHR	PRAGUE	11	3	20	-4	7	-2	51	24
DENMAR	COPENHAGEN	12	4	17	-2	8	0.1	28	1
EGYPT	CAIRO	28	17	37	12	23	0.6	0	******
	ASWAN	35	20	41	12	28	-0.2	0	******

Based on Preliminary Reports

April 2023

COUNTRY	CITY	AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	TOT	DEP NRM
ESTONI	TALLINN	11	2	21	-3	6	1.2	38	3
ETHIOP	ADDIS ABABA	***	***	28	7	***	*****	*****	******
F GUIA	CAYENNE	30	23	32	20	26	-0.9	600	157
FIJI	NAUSORI	32	23	33	20	27	1.6	158	-148
FINLAN	HELSINKI	11	0	19	-7	5	0.8	13	-22
FRANCE	PARIS/ORLY	15	6	23	0	11	-0.6	48	4
	STRASBOURG	15	5	23	-3	10	-0.9	29	-13
	BOURGES	16	6	24	-1	11	-0.4	39	-23
	BORDEAUX	19	9	27	0	14	0.8	39	-37
	TOULOUSE	18	9	25	2	14	0.8	46	-19
	MARSEILLE	20	9	26	3	15	0.6	3	-48
GABON	LIBREVILLE	30	24	32	17	27	-0.1	193	-96
GERMAN	HAMBURG	12	4	23	-4	8	-0.8	46	7
	BERLIN	13	4	22	-4	9	-1.6	49	20
	DUSSELDORF	14	5	22	-3	9	-1.0	70	24
	LEIPZIG	12	4	22	-2	8	-1.4	56	24
	DRESDEN	12	4	21	-3	8	-1.8	54	18
	STUTTGART	13	4	22	-4	9	-1.0	62	23
	NURNBERG	13	4	23	-4	8	-0.9	47	14
	AUGSBURG	12	3	22	-5	8	-0.9	79	33
GREECE	THESSALONIKA	19	9	24	4	14	-0.4	80	45
	LARISSA	20	7	25	3	13	-0.6	48	16
	ATHENS	22	12	24	9	17	0.9	10	******
GUADEL	RAIZET	30	22	31	20	26	-0.1	132	34
HONGKO	HONG KONG IN	27	22	31	19	25	0.1	99	-51
HUNGAR	BUDAPEST	15	6	22	-2	11	-1.8	30	-4
ICELAN	REYKJAVIK	8	2	12	-2	5	1.5	146	89
INDIA	AMRITSAR	34	18	40	12	26	0.0	11	-31
	NEW DELHI	35	20	40	14	28	-1.5	20	6
	AHMEDABAD	39	25	42	21	32	-0.1	4	******
	INDORE	36	21	40	17	29	-1.0	36	28
	CALCUTTA	37	26	42	20	32	2.2	75	******
	VERAVAL	32	24	38	22	28	0.5	2	******
	BOMBAY	34	25	39	22	29	0.0	15	******
	POONA	37	19	40	16	28	-1.2	38	******
	BEGAMPET	36	24	39	20	30	-1.9	200	******
	VISHAKHAPATN	34	28	36	25	31	1.3	1	******
	MADRAS	36	26	40	24	31	0.3	6	-32
	MANGALORE	34	25	36	22	30	0.2	0	******
INDONE	SERANG	33	24	35	23	29	0.8	107	-47
IRELAN	DUBLIN	13	6	18	-1	9	1.1	79	22
ITALY	MILAN	19	8	24	2	14	-0.4	80	16
	VERONA	18	7	23	1	13	-0.3	54	-15
	VENICE	16	8	22	2	12	-1.1	0	-71
	GENOA	18	12	25	7	15	0.0	51	******
	ROME	19	8	23	0	13	-0.6	40	-14
	NAPLES	18	9	24	4	14	-1.3	62	-17
JAMAIC	KINGSTON	31	24	34	21	28	0.6	19	-12
JAPAN	SAPPORO	13	6	21	2	10	2.3	68	13
	NAGOYA	21	12	28	5	16	1.4	182	54
	TOKYO	22	12	27	7	17	2.4	112	-21
	YOKOHAMA	***	***	25	8	***	*****	*****	******
	KYOTO	***	***	25	5	***	*****	*****	******
	OSAKA	21	12	27	7	16	1.2	240	138
KAZAKH	KUSTANAY	15	1	26	-10	8	1.7	0	-25
	TSELINOGRAD	12	0	28	-13	6	-0.7	51	31
	KARAGANDA	14	-1	28	-8	6	-0.1	13	-17
KENYA	NAIROBI	25	16	29	14	21	-0.3	141	******
LIBYA	BENGHAZI	24	13	31	10	18	-0.5	6	******
LITHUA	KAUNAS	13	4	22	-2	9	0.9	35	-3
LUXEMB	LUXEMBOURG	12	4	19	-3	8	-1.4	82	32
MALAYS	KUALA LUMPUR	34	25	35	24	30	0.8	223	-78
MALI	TIMBUKTU	***	***	***	***	***	*****	*****	******
	BAMAKO	40	24	43	20	32	0.2	0	******
MARSHA	MAJURO	30	26	31	24	28	0.3	345	63
MARTIN	LAMENTIN	31	23	33	22	27	0.2	72	-51
MAURIT	NOUAKCHOTT	34	20	45	18	27	1.5	*****	******
MEXICO	GUADALAJARA	***	***	35	12	***	*****	*****	******
	TLAXCALA	***	***	32	9	***	*****	*****	******
	ORIZABA	***	***	32	13	***	*****	*****	******
MOROCC	CASABLANCA	23	16	31	11	19	2.2	7	******
	MARRAKECH	31	16	41	9	23	4.2	21	******
MOZAMB	MAPUTO	30	20	37	17	25	0.5	6	-36
N KORE	PYONGYANG	18	8	26	2	13	1.8	74	18
NEW CA	NOUMEA	29	22	32	20	26	1.3	172	67
NIGER	NIAMEY	42	21	44	0	32	-3.3	0	******
NORWAY	OSLO	9	0	19	-8	4	-0.8	85	34
NZEALA	AUCKLAND	21	15	24	6	18	1.4	96	12
	WELLINGTON	18	12	21	6	15	0.8	65	-12
P RICO	SAN JUAN	29	23	33	20	26	-0.7	108	-9
PAKIST	KARACHI	34	25	38	22	30	0.6	17	******
PERU	LIMA	28	24	30	22	26	4.0	0	******
PHILIP	MANILA	33	26	35	23	30	-0.2	68	47
PNEWGU	PORT MORESBY	31	24	32	23	28	0.2	299	161
POLAND	WARSAW	14	5	23	-5	9	-0.4	52	17
	LODZ	13	3	23	-7	8	-1.0	63	29
	KATOWICE	12	3	22	-6	8	-1.1	40	-3
PORTUG	LISBON	25	13	32	9	19	3.3	18	-37
ROMANI	BUCHAREST	17	4	23	0	10	-0.8	69	19
RUSSIA	ST.PETERSBUR	12	3	22	-4	7	1.7	22	-15
	KAZAN	16	5	25	-4	10	3.6	152	119
	MOSCOW	15	4	21	-1	10	2.6	28	-9
	YEKATERINBUR	13	1	23	-11	7	1.8	18	-13
	OMSK	10	-1	26	-12	4	-0.6	2	-24
	BARNAUL	8	-2	26	-15	3	-2.8	26	-2
	KHABAROVSK	10	-1	19	-5	5	-0.4	76	39
	VLADIVOSTOK	10	4	18	-1	7	1.1	82	38
	VOLGOGRAD	17	5	26	-2	11	1.2	0	-27
	ASTRAKHAN	19	8	28	-2	14	1.7	35	10
	ORENBURG	17	4	27	-8	10	2.4	36	8
S AFRI	JOHANNESBURG	***	***	24	8	***	*****	*****	******
	DURBAN	26	19	35	16	23	0.3	70	-13
	CAPE TOWN	22	12	29	7	17	-0.3	51	10
S KORE	SEOUL	19	10	28	3	14	1.3	35	-39
SAMOA	PAGO PAGO	30	26	32	24	28	-0.4	398	111
SENEGA	DAKAR	28	21	45	18	24	2.7	1	******
SPAIN	VALLADOLID	22	7	30	-1	15	3.3	5	-44
	MADRID	25	8	32	1	16	3.6	11	-28
	SEVILLE	30	12	37	7	21	3.5	2	******
SWITZE	ZURICH	12	6	20	0	9	-0.9	98	18
	GENEVA	14	6	24	-1	10	-0.5	57	-9
SYRIA	DAMASCUS	25	9	31	0	17	0.8	10	******
TAHITI	PAPEETE	31	25	33	24	28	0.4	114	14
TANZAN	DAR ES SALAA	31	24	34	22	27	0.2	351	89
THAILA	PHITSANULOK	39	26	41	23	32	1.1	76	9
	BANGKOK	37	29	40	27	33	1.0	25	-73
TOGO	TABLIGBO	***	***	40	0	***	*****	*****	******
TRINID	PORT OF SPAI	32	24	33	22	28	0.0	140	78
TUNISI	TUNIS	23	12	31	6	18	0.5	35	-1
TURKEY	ISTANBUL	16	10	24	6	13	0.5	95	52
	ANKARA	16	4	22	-2	10	0.4	34	-8
TURKME	ASHKHABAD	28	14	40	5	21	4.3	3	-24
UKINGD	ABERDEEN	10	4	14	-1	7	-0.4	46	-12
	LONDON	15	6	19	0	10	-0.1	66	24
UKRAIN	KIEV	13	7	20	1	10	-0.5	103	62
	LVOV	13	4	21	-2	8	-1.0	61	11
	KIROVOGRAD	14	7	20	2	10	0.2	66	39
	ODESSA	12	8	18	3	10	-0.4	118	90
	KHARKOV	15	8	22	4	11	1.4	71	39
UZBEKI	TASHKENT	24	12	35	2	18	1.5	38	-26
VENEZU	CARACAS	28	24	32	20	26	-0.4	0	-25
YUGOSL	BELGRADE	16	8	23	0	12	-2.1	87	36
ZAMBIA	LUSAKA	***	***	30	13	***	*****	*****	******
ZIMBAB	KADOMA	***	***	31	***	***	*****	*****	******

Based on Preliminary Reports

EUROPE
Total Precipitation(mm)
April 23 - 29, 2023
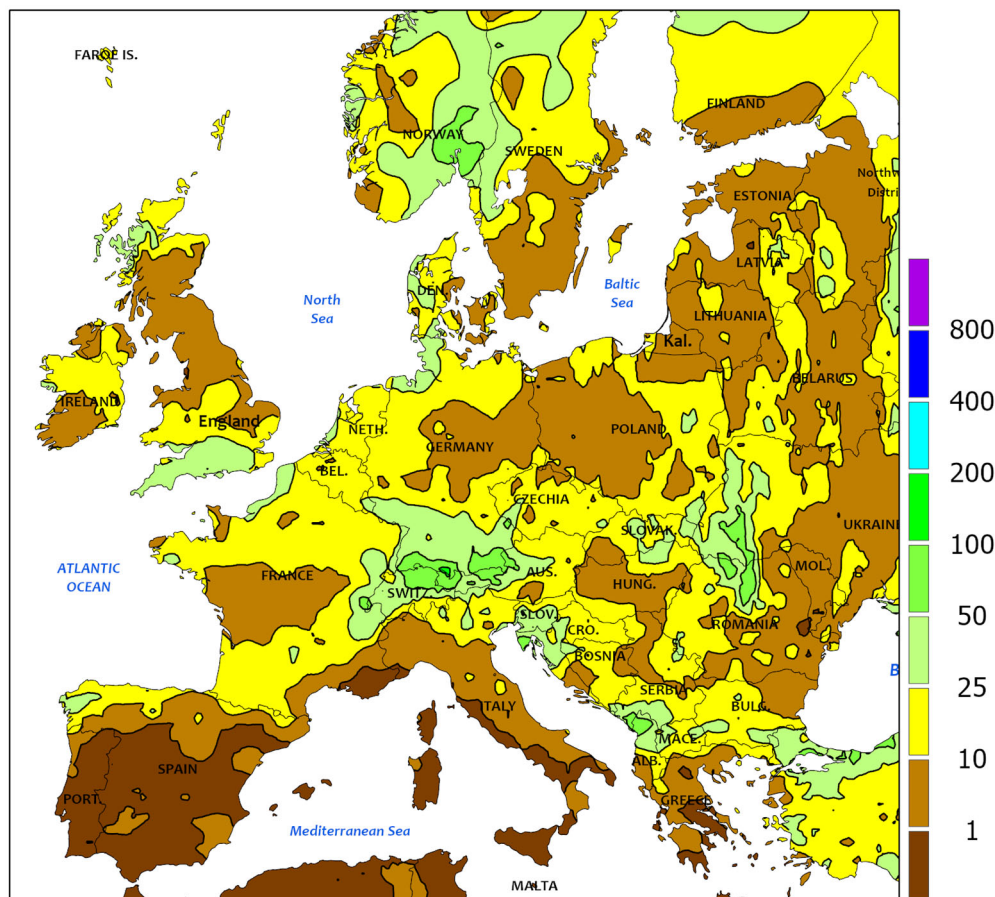
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
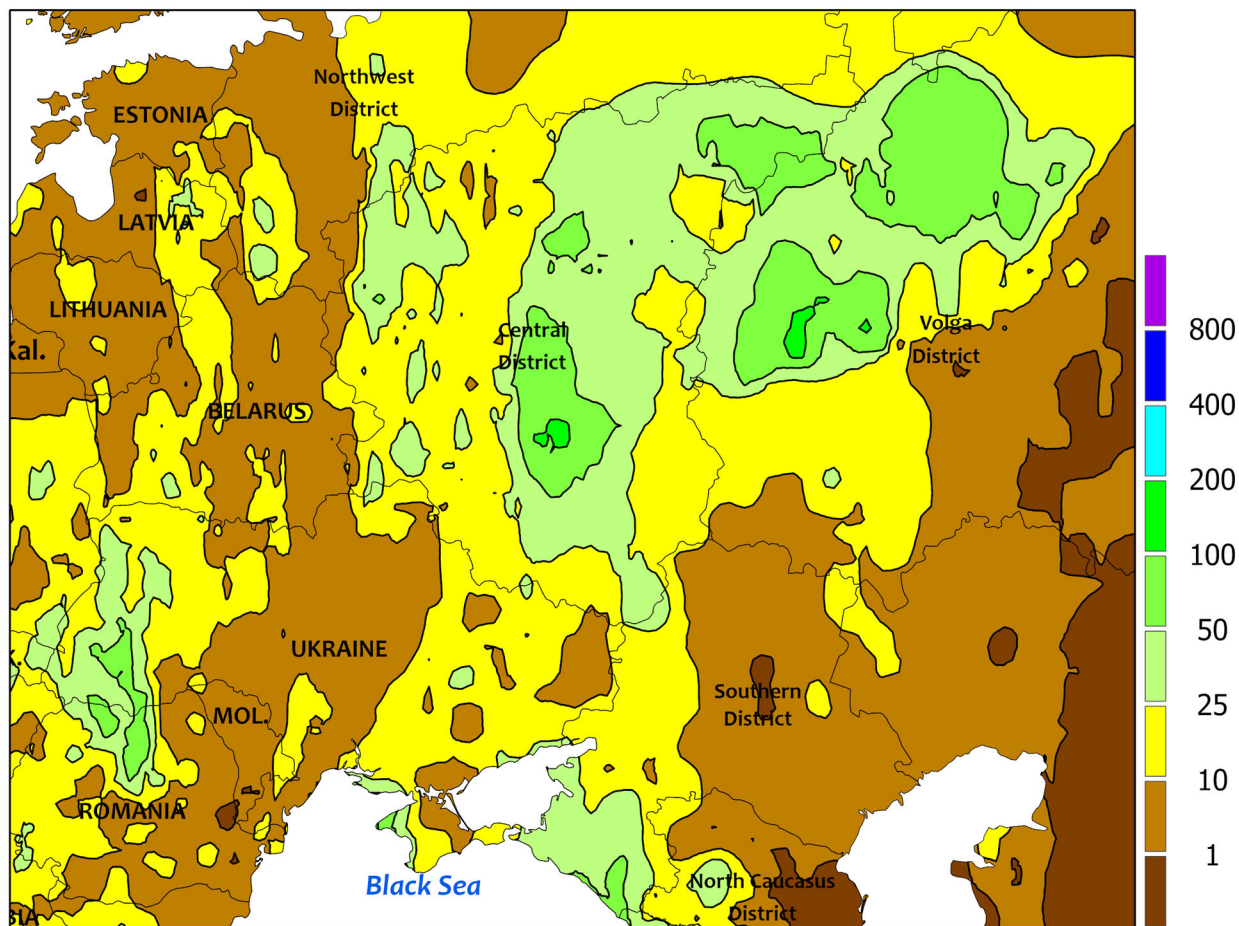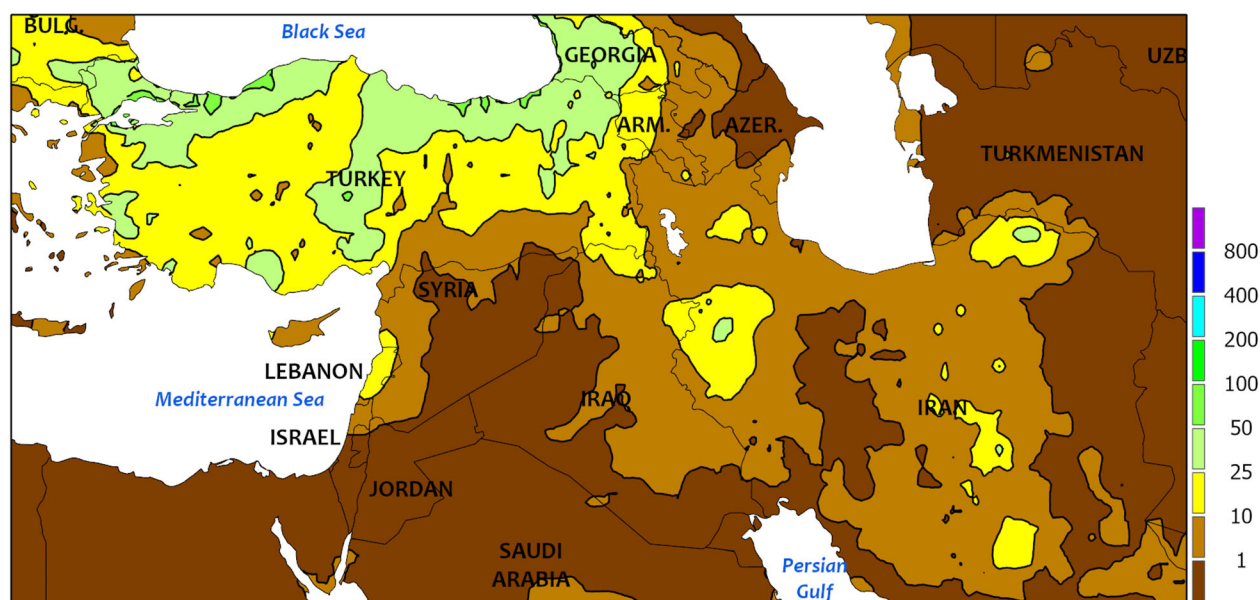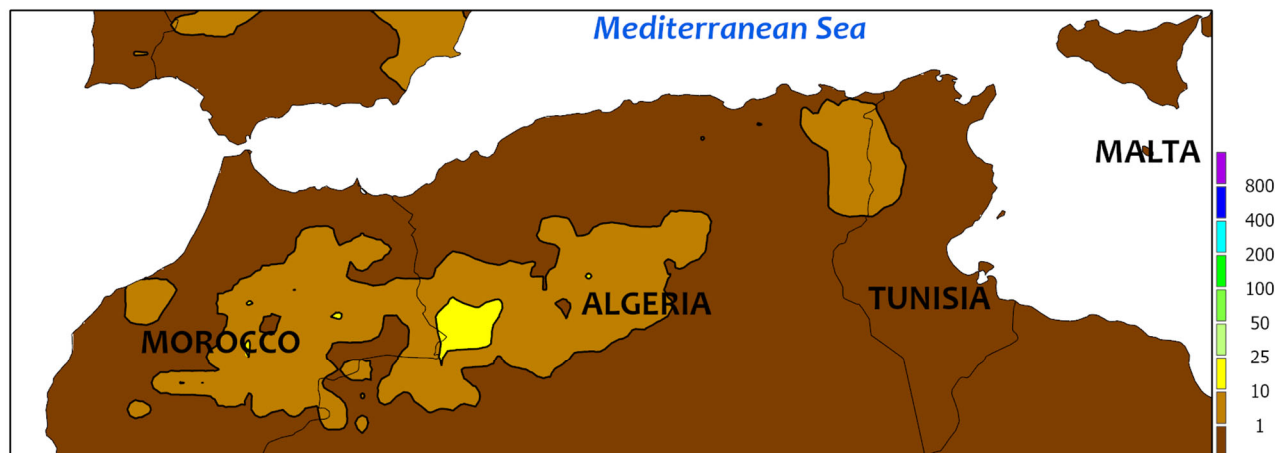Based on preliminary data

EUROPE

Unsettled weather continued, though drought and heat intensified in southwestern Europe despite localized showers. Widespread light to moderate showers and thunderstorms (5-40 mm, locally more) persisted from England and France eastward into Poland, Hungary, and the Balkans. As a result, conditions remained good to excellent for vegetative (north) to reproductive (south) winter grains and oilseeds. Unlike last week, however, rain bypassed northwestern Italy's Piemonte Region, where both short- and long-term drought remained firmly entrenched. Meanwhile, drought intensified in Portugal and Spain despite localized showers near the northern coast (5-25 mm). Year-to-date precipitation was the lowest on record (over the past 30 years) across most of Spain's primary growing regions, with values as of April 30 a meager 28 percent of average in Andalucía (deficit of 130 mm), 26 percent in Castilla La Mancha (100 mm deficit), and 51 percent of average across Castilla y León (deficit approaching 75 mm). Exacerbating the drought's impacts on reproductive to filling winter wheat and barley were temperatures which averaged 5 to 9°C above normal, with daytime highs in the middle and upper 30s (degrees C) in central and southern crop areas. Average temperatures for the last week of April were the highest on record in every primary winter crop delegation, easily eclipsing the previous benchmarks set in 2002 and 2010.

For additional information contact: mark.brusberg@usda.gov

WESTERN FSU
Total Precipitation(mm)
April 23 - 29, 2023

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

## WESTERN FSU

Widespread showers persisted, with warm conditions in the east contrasting with cool weather in the west. Additional showers and thunderstorms netted most primary growing areas 5 to 40 mm in Moldova, Ukraine, and western Russia. Consequently, soil moisture remained adequate to abundant for vegetative winter grains and oilseeds as well as summer crop emergence and establishment. Temperatures averaged up to 3°C below normal in Moldova and western Ukraine, near normal in central and eastern Ukraine, but 2 to 5°C above normal in Russia (warmest in the east and north).

The WWCB focuses entirely on weather and resultant crop conditions; conflict and unrest are beyond the scope of this publication.

MIDDLE EAST
Total Precipitation(mm)
April 23 - 29, 2023

CLIMATE PREDICTION CENTER, NOAA
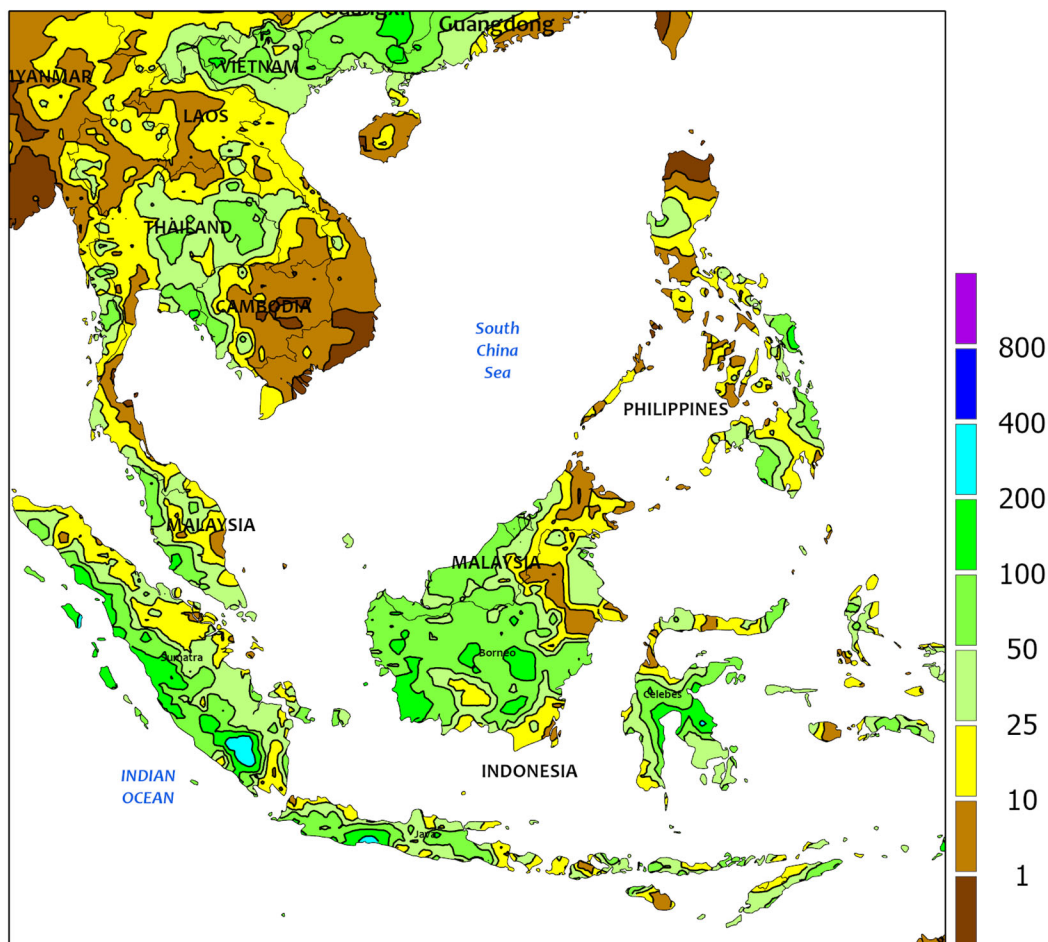Computer generated contours
Based on preliminary data

MIDDLE EAST

Showers continued in Turkey and returned to parts of Iraq and Iran. In Turkey, an additional 5 to 50 mm of rainfall boosted moisture supplies for winter grains and summer crops. Prospects for late vegetative (Anatolian Plateau) to filling (GAP Region) wheat and barley have improved considerably following pronounced fall and winter drought, though winter crops would benefit from a spell of warmer, drier weather. Variable showers (2-30 mm) also returned to much of Iraq as well as western and northern Iran, maintaining good moisture supplies for reproductive to filling winter crops. In contrast, most of northeastern Iran remained entrenched in drought, though spotty showers (up to 30 mm) provided highly localized relief.   Elsewhere, sunny skies across the eastern Mediterranean Coast and environs favored filling to maturing wheat and barley. Temperatures averaged 2 to 4°C below normal across the western third of the region, 1 to 3°C above normal from Iraq into northern Iran, but up to 6°C above normal in the drought-afflicted Khorasan Province of northeastern Iran.

For additional information contact: mark.brusberg@usda.gov

NORTHWESTERN AFRICA
Total Precipitation(mm)
April 23 - 29, 2023

CLIMATE PREDICTION CENTER, NOAA
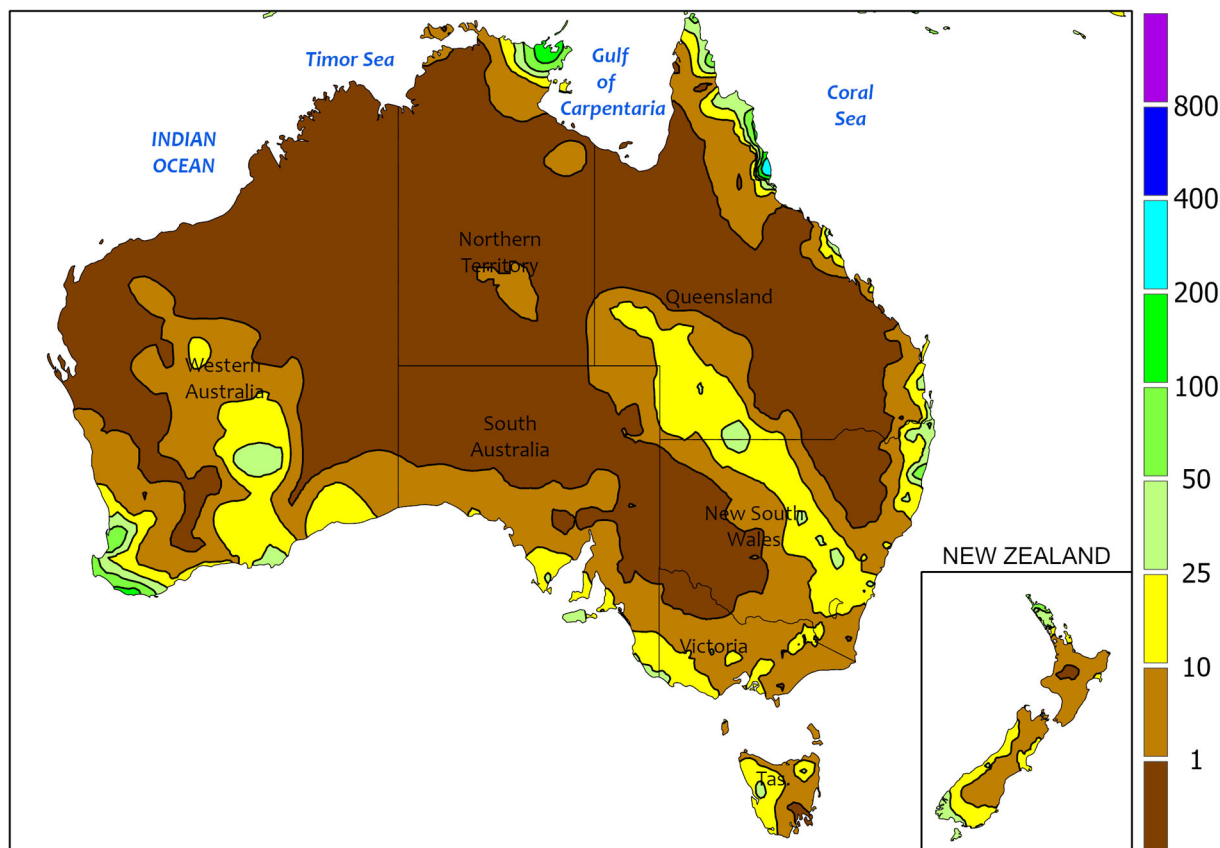Computer generated contours
Based on preliminary data

NORTHWESTERN AFRICA

Dry and very hot weather further lowered winter grain yield prospects across much of the region. No rain was reported save for 1 to 5 mm along the Algeria-Tunisia border and up to 20 mm in the higher terrain of western Algeria. Otherwise, this season's severe to extreme drought continued. Exacerbating the drought's impacts on filling to maturing winter grains were temperatures which averaged 4 to 9°C above normal across the entire region. Daytime highs reached 41°C in Morocco, 42°C in north-central Algeria, and 38°C in northern Tunisia. Average temperatures for the last week of April were by far the highest on record (over the past 30 years) in Morocco, western and central Algeria, and most of Tunisia. The latest satellite-derived Vegetation Health Index (VHI) indicated fair to very poor conditions for maturing winter grains from Morocco into central Algeria. The VHI remained highly variable farther east, with good crop vigor in coastal portions of northeastern Algeria and Tunisia contrasting with a historically low VHI farther inland; wheat and barley were filling over the eastern third of the region, but still reproductive on the cooler Hautes Plateau of eastern Algeria.

EASTERN ASIA
Total Precipitation(mm)
April 23 - 29, 2023
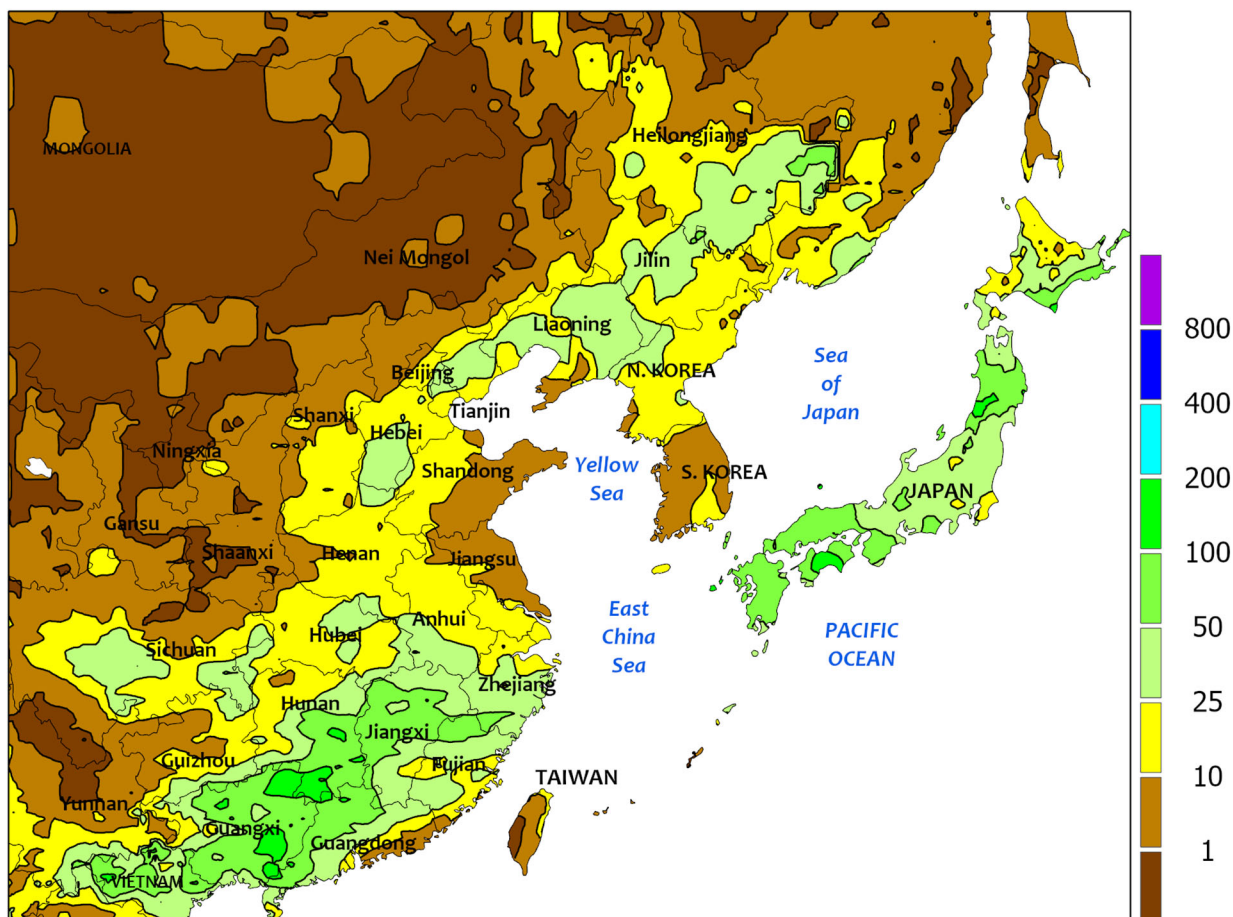
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

EASTERN ASIA

Showers moved across eastern China early in the period, with most areas recording less than 25 mm. The rainfall was a continuation of heavier rain late last week, benefiting reproductive wheat on the North China Plain. Following little spring rainfall at the start of the season, timely wet weather in early and late April pushed seasonal totals above average. Meanwhile, weekly showers became increasingly heavier and more regular toward the Yangtze Valley (10-50 mm) and into southern-most China (25-100 mm). Here to, the moisture was welcome for reproductive rapeseed and vegetative early-crop rice. Additionally, despite weekly temperatures averaging up to 7°C below normal, warmer weather moved into all the aforementioned areas by mid-week. Elsewhere, warmer conditions in western China supported cotton planting after periods of cool weather earlier in April delayed sowing.

SOUTHEAST ASIA
Total Precipitation(mm)
April 23 - 29, 2023

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

SOUTHEAST ASIA

Showers prevailed throughout most of the region, with the highest totals predominantly confined to southern sections. Indonesia and Malaysia recorded widespread rainfall amounts between 25 and 100 mm, supporting oil palm and seasonal rice. In the Philippines, showers were widespread but totals over 25 mm were generally localized; preparations for the main growing season continued. Meanwhile, showers (10-100 mm) flared across Thailand and environs, providing beneficial early-season moisture, as rice growers continued to prepare paddies for the onset of the wet season (southwest monsoon) in May.

AUSTRALIA
Total Precipitation(mm)
April 23 - 29, 2023

Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/
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CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

AUSTRALIA

Scattered showers (5-25 mm, locally more) dotted the wheat belt, maintaining overall favorable moisture supplies for early winter grain and oilseed development. Root zone soil moisture remained near to above normal in major wheat, barley, and canola growing areas, promoting germination and emergence of the earliest sown crops. Winter crop planting continued to gain momentum, with the pockets of rain triggering additional planting in their wake. Mostly dry weather in northern New South Wales and southern Queensland allowed cotton, sorghum, and other summer crop harvesting to progress without delay. Temperatures averaged near normal in the northeast, 1 to 2°C above normal in the southeast, and 2 to 4°C below normal in the west. Maximum temperature ranged from the middle 20s to near 30 degrees C throughout the wheat belt.

ARGENTINA
Total Precipitation(mm)
April 23 - 29, 2023

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data
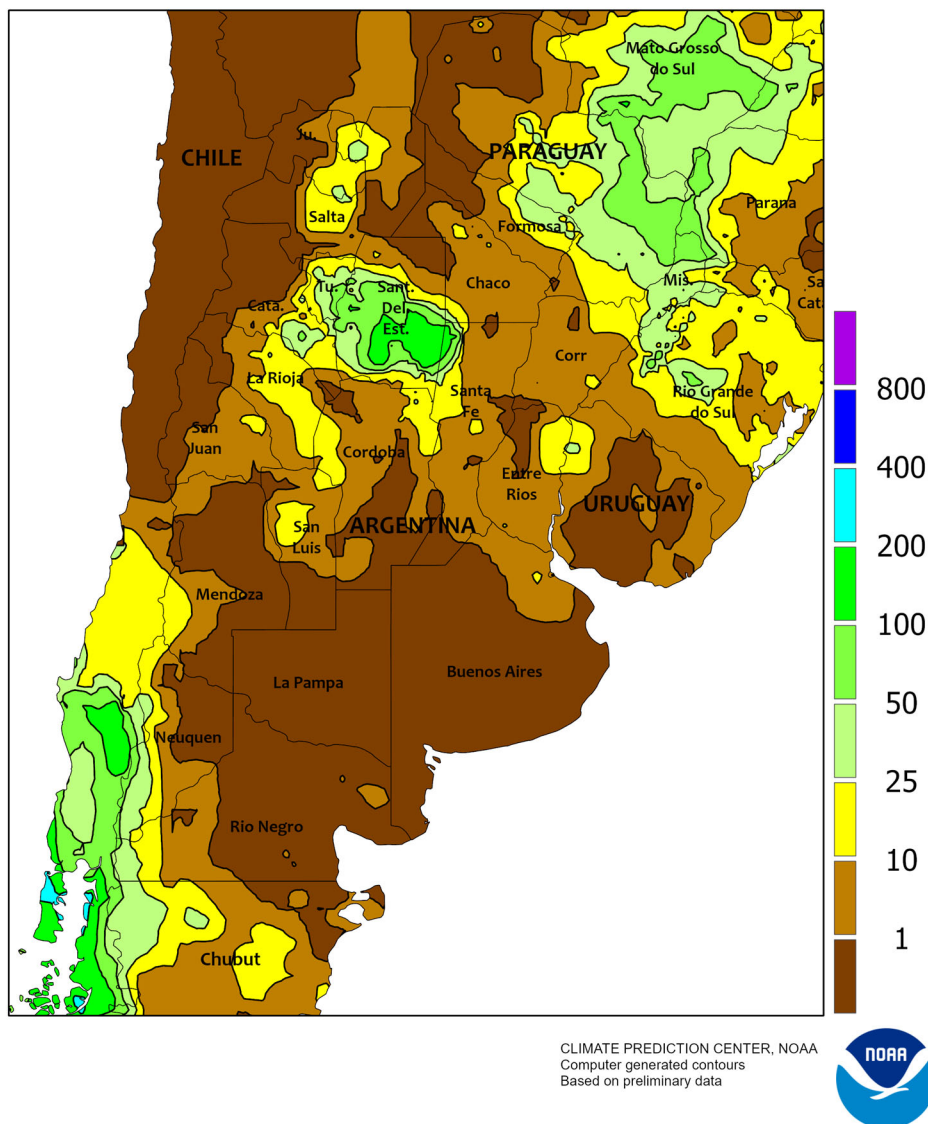
ARGENTINA

Dry, unseasonably warm weather fostered a rapid pace of autumn fieldwork in central Argentina. La Pampa, southern Cordoba, and most of Buenos Aires were completely dry, with other neighboring farming areas recording less than 10 mm. Weekly temperatures averaging up to 4°C above normal (daytime highs reaching the lower 30s degrees C) accompanied the dryness, fostering rapid drydown of soybeans and corn but drying topsoils for winter grain germination. Farther north, early-week, moderate to locally heavy showers (10-25 mm,

locally exceeding 50 mm) increased moisture for the upcoming winter grain season in the northwest (including Santiago del Estero), although the moisture was untimely for cotton harvesting. Showers were generally lighter and more scattered farther east, supporting fieldwork. According to the government of Argentina, corn was 24 percent harvested as of April 27 versus 35 percent last year, while soybeans were 32 percent harvested (46 percent last year). Cotton was 19 percent harvested, compared with 23 percent last year.

For additional information contact: mark.brusberg@usda.gov

BRAZIL
Total Precipitation(mm)
April 23 - 29, 2023
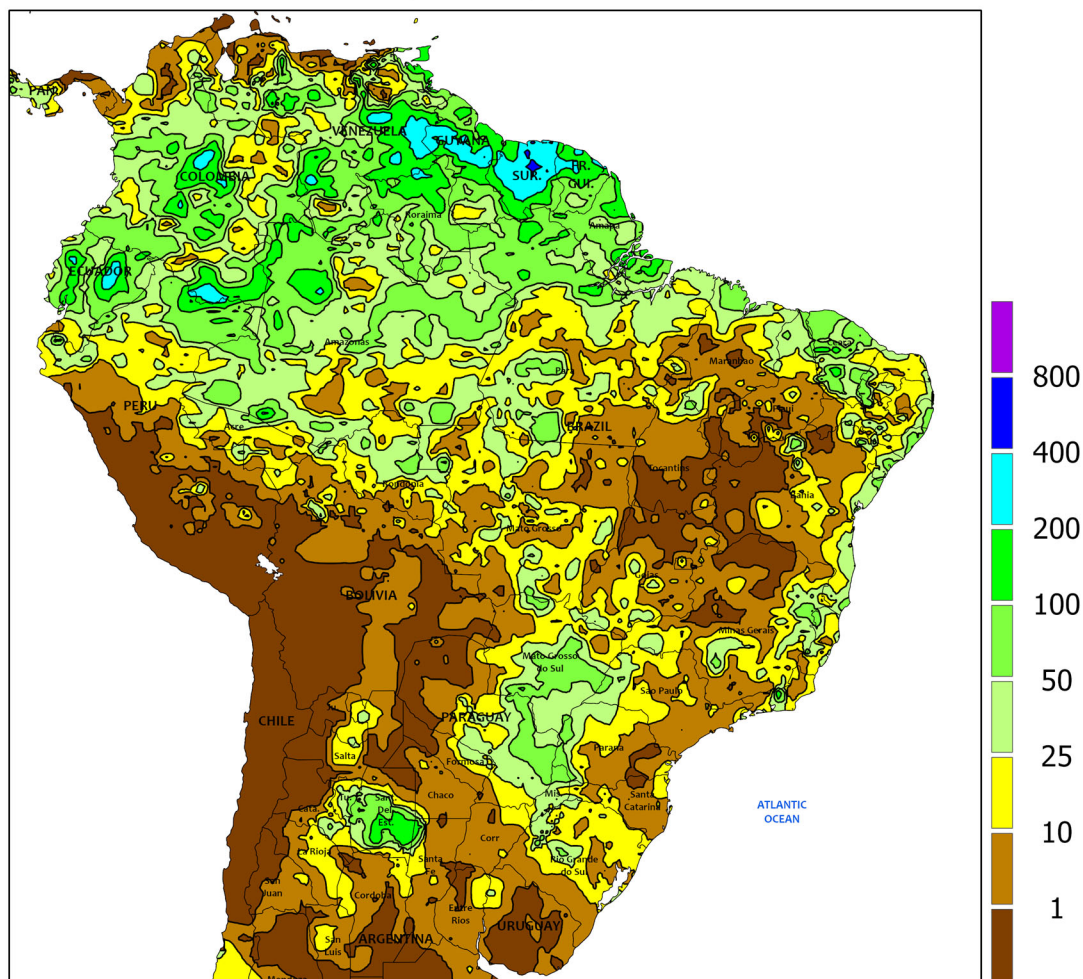
CLIMATE PREDICTION CENTER, NOAA
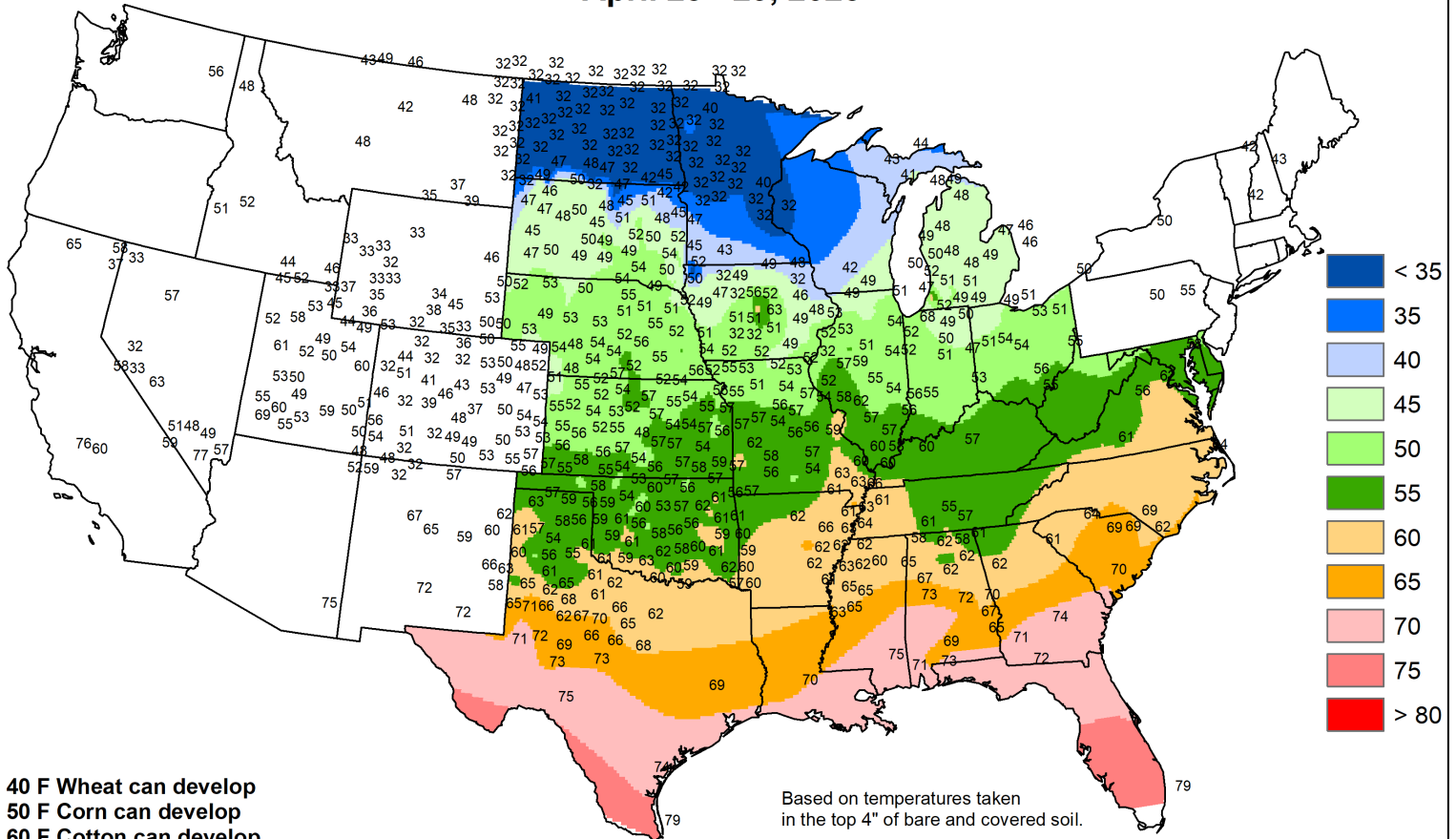Computer generated contours
Based on preliminary data

BRAZIL

Showers maintained favorable prospects for immature corn in central and southern Brazil. Rainfall totaled 10 to 50 mm – locally approaching 100 mm – from southeastern Mato Grosso to Rio Grande do Sul. Highest daytime temperatures in these locations ranged from the lower and middle 30s (degrees C) in traditionally warmer locations to the middle and upper 20s in the south. According to the government of Paraná, soybeans and first crop corn were 98 and 87 percent harvested, respectively, as of April 24. Meanwhile, second-crop corn planting was completed, with 25 percent of the crop having reached flowering, and wheat planting was also advancing (10 percent). In Rio Grande do Sul, soybeans were 30 percent filling to maturing as of April 27, with 70 percent harvested, while corn was 82 percent harvested. Drier conditions prevailed elsewhere, including cotton areas in the northeastern interior (northern Minas Gerais through western Bahia), with highest daytime temperatures reaching the middle 30s by week's end. This region has been trending dry since the early part of April, limiting moisture for immature cotton. Additional significant moisture for this season's cotton crop is unlikely given the nearness of the dry season.

MEXICO
Total Precipitation(mm)
April 23 - 29, 2023
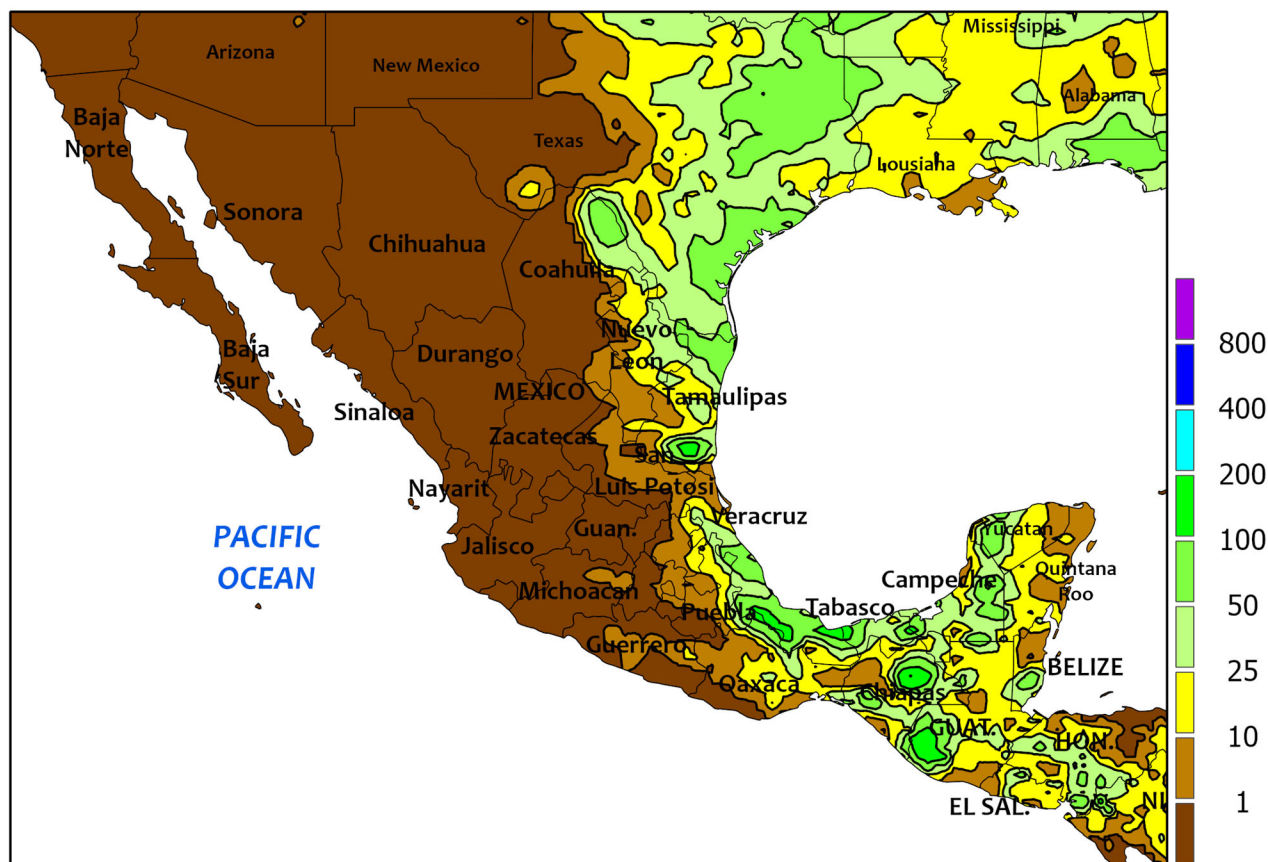
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

MEXICO

Beneficial showers continued along the Gulf Coast, providing timely moisture for immature winter-grown crops and new summer plantings. Most locations from southern Veracruz south and eastward recorded rainfall totaling 25 to 50 mm, locally reaching 100 mm. The moisture was generally confined to farming areas closest to the coast, with little reaching the southern plateau corn belt (Puebla westward). Similarly, showers (25-100 mm) in the northeast benefited immature winter sorghum in the vicinity of Tamaulipas. Meanwhile, seasonally drier conditions prevailed in western and central Mexico, where producers await the onset of seasonal rainfall for planting corn and other rainfed summer crops.

Average Soil Temperature (Deg. F)

April 23 - 29, 2023

Legend:
- < 35
- 35
- 40
- 45
- 50
- 55
- 60
- 65
- 70
- 75
- > 80

40 F Wheat can develop
50 F Corn can develop
60 F Cotton can develop

Based on temperatures taken in the top 4" of bare and covered soil.

Data provided by the Climate Prediction Center, High Plains Regional Climate Center, Nebraska Mesonet at Univ of Nebraska, CoAgMet at Colorado State Univ, Kansas Mesonet at Kansas State Univ, North Dakota Agricultural Weather Network at North Dakota State Univ, Wyoming State Climate Office at the Univ of Wyoming, Illinois State Water Survey, Iowa State University, Oklahoma Mesonet, Purdue University, University of Missouri, Illinois State Water Survey, Michigan Automated Weather Network, West Texas Mesonet, South Dakota State Univ. Mesonet, Ohio Agricultural Research and Development Center, Univ. of Missouri and USDA/NRCS.

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